

OECD Multi-level Governance Studies

# A Review of Local Government Finance in Israel

REFORMING THE ARNONA SYSTEM





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# Foreword

In Israel, the property tax, called Arnona, is the main local government tax, representing more than 80% of municipal tax revenue. It is also a major source of total local government revenue, accounting for 36% of municipal revenue. Among OECD countries, only Australia and New Zealand rely more heavily on the property tax for funding local governments. Arnona revenue was 2% of GDP in 2017, more than twice as high as the 0.9% of GDP average among OECD countries. Thus, in addition to being the cornerstone of local taxation, the Arnona is a central pillar of the Israeli system of local government finance.

Property taxation is a central component of local taxation in many countries around the world. Recurrent taxes on immovable properties are considered a good local tax, particularly well-suited for financing local governments. However, like any other tax, the property tax may also create distortions that need to be minimised. In Israel, the design of the property tax system has increased fiscal disparities among municipalities and has several negative consequences on the capacity of municipalities to provide adequate and equitable access to economic and social infrastructure and services across the country as well on local economic development.

To address these issues, the Israeli Ministry of Finance asked the OECD to conduct an in-depth evaluation of local government finance and the Arnona system, and to offer guidance on how to improve and reform the current system. This report includes a comprehensive analysis of the Israeli system of local government finance, a diagnosis of the major problems, and a set of 13 policy recommendations designed to improve the efficiency and equity of the system of local government finance in both the short and long-run. The first eight recommendations focus on improving the system and the remaining five on fundamentally reforming the Arnona system.

This report is part of the OECD Multi-Level Governance Studies series. It was conducted by the OECD Centre for Entrepreneurship, SMEs, Regions and Cities (CFE), under the leadership of the OECD Regional Development Policy Committee (RDPC). The RDPC is a leading international forum in the fields of regional, urban, and rural development policy and in multi-level governance. It has led the way in acknowledging the importance of multi-level governance and place-based approaches tailored to local and regional needs. To support the RDPC's leadership in this policy dialogue, the OECD created the Multi-Level Governance Studies series in 2016, focusing on both country and thematic work. The report was approved by Delegates of the RDPC by written procedure on 20 November 2019 under the reference [CFE/RDPC(2019)12].

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# Executive summary

Israel's local governments play an important role in the provision of public services. The central government has delegated to local governments the responsibility for providing elementary and secondary education and social welfare. In addition local governments provide a range of other services including sanitation, water and sewer, parks and recreation, and road maintenance.

Local governments are financed through a combination of revenue, primarily from the *Arnona* (the Israeli property tax) and grants from the central government. Over three-quarters of total government grants directly finance public education and welfare.

The *Arnona* accounts for a higher share of local tax revenue (around 81% compared to the OECD average of above 41%) and total local government revenue than in all other OECD countries except for Australia and New Zealand.

Unlike most countries that use property taxes, the *Arnona* is calculated on the basis of the size of property (in square meters) rather than its value, and levied on the users of both residential and non-residential property. Thus, local governments have very limited discretion over their *Arnona* rates and annual rate increases in rates are tied to inflation. Rates are generally higher for non-residential than residential property and vary substantially by type of non-residential property. Discounts are available for certain groups of households, such as low-income families, the elderly, or students that may have difficulty in paying their *Arnona* charges.

## Key findings

- Although data are limited, it appears that the *Arnona* is a regressive tax and that *Arnona* payments differ substantially among households in similar economic conditions. As the size (area) of housing units is not closely related to household income, many households with low and moderate revenues face high *Arnona* payments. Moreover, identically sized housing units in any given area may vary greatly in value, while all face identical *Arnona* liabilities. This different treatment of taxpayers may generate public opposition to the tax, especially if the *Arnona* becomes a more transparent tax.
- The *Arnona* creates an incentive for local governments to discourage new housing development in favour of, in some cases, excessive non-residential development. The costs of providing public services to new residents often exceed the *Arnona* revenue, associated with these new residents. In contrast, non-residential development tends to create fiscal surpluses. As a result, many local governments may underinvest in new housing, while focusing on non-residential development even under the risks of an oversupply and not economic viability.
- Disparities in *Arnona* revenue generation across local governments play a prominent role in the disparities in the provision of local public services, especially education and social services. *Arnona* revenue per student is lowest for local governments with high shares of citizens with low socio-economic clusters. This pattern contributes to lower per pupil spending and poorer educational performance in those clusters. While social welfare needs are generally higher in communities with low socio-economic status, available resources from the *Arnona* and government grants are often not sufficient to meet these needs.

- Although government grants have reduced fiscal disparities among local governments, substantial differences remain in local governments' capacity to provide the public services for which they are responsible. The allocation of government transfers, especially Balance Grants, to local governments reduces the disparities in local governments' ability to finance public services. Nonetheless, significant disparities remain. They are due in part to the low magnitude of the transfers and deficiencies in the Balance Grant allocation formula.

## Key recommendations

This report contains 13 policy recommendations. The first eight are designed **to improve** the existing *Arnona* system, while the last five provide a blueprint for **a more fundamental reform** of the system of local government finance in Israel.

### ***Policy recommendations for improving the Arnona system***

- **Reduce the large disparity between non-residential and residential *Arnona* rates by reducing non-residential rates.** The government should reduce the ratio of non-residential rates to residential rates by mandating reductions in non-residential *Arnona* rates. As the reduction of *Arnona* rates will reduce the tax revenue available to local governments, this move would be only feasible if combined with other policies replacing the lost *Arnona* revenue.
- **To help replacing *Arnona* revenue, local governments could develop alternative sources of revenue.** Local governments should consider raising own-revenues through tourist taxes, parking taxes, taxes on ride-sharing services, and license taxes on various local activities.
- **Reform the central government fiscal transfers in support of the major delegated functions - education and social welfare.** Matching requirement attached to education and social services grants should be reconsidered.
- **Improve the *Arnona*** by (1) standardising the classification of types of property across the country; (2) establishing a uniform national system for measuring taxable area; (3) addressing the problems created by the current system of *Arnona* exemptions and discounts; (4) allowing a limited degree of rate setting by local governments; and (5) assisting local governments in increasing their *Arnona* collection rates through the provision of training, technical assistance, and capital grants for the modernisation of local governments' computer systems. These policies should already improve the effectiveness, fairness, and efficiency of the *Arnona* system prior to the undertaking of more substantial reforms.

### ***Policy recommendations for a deeper reform of the Arnona system***

- **Establish a value-based system of property taxation for all non-residential property.** Both fairness and economic efficiency will be enhanced by converting the non-residential *Arnona* into a tax based on the market value of property. The transition to a value-based system will be relatively straightforward, in part because much of the data needed to calculate market values are already available in the form of information that businesses must use to comply with existing taxes.
- **Establish a value-based system of residential property taxation.** The transition to a value-based property tax system will increase the vertical and horizontal equity of the *Arnona*. Recently developed methods for property assessment combined with new technologies will greatly reduce the costs involved in determining the value of residential property. Lessons gained from establishing a value-based non-residential *Arnona* will facilitate the establishment of a reformed residential *Arnona*.

# Introduction

Established in 1948 by the Declaration of the Establishment of the State of Israel, the Israeli multi-level governance systems is unitary, based on two levels of governments, the central level and the local level. The recognition of local governments is enshrined in different basic laws as Israel has no formal written constitution but thirteen “Basic Laws”. Local governments are governed by British colonial Municipal Ordinances of 1934 and 1941 that are still in place.

No major or comprehensive decentralisation reform or devolution of powers has officially taken place since. The central government retains most of the powers and strict oversight of local government activities and finances. Bylaws and ordinances adopted by councils, as well as their budgets, are subject to approval by the Ministry of the Interior. Looking at fiscal indicators in an international comparative way, Israel belongs to the group of OECD centralised countries, together with countries such as Chile, Hungary, Portugal, New Zealand or Ireland, where local governments have a limited role in terms of spending responsibilities (OECD, 2018<sup>[1]</sup>). In 2016, Israeli local governments accounted for 14.0% of public expenditure and 5.5% of GDP (vs 28.7% of public expenditure and 9.2% of GDP in OECD unitary countries on average), 15% of public staff expenditure (vs 43%), 9% of public tax revenue (vs 20%) and 3% of public debt (vs 12%).

Some de-facto decentralisation of political power however occurred in Israel since the 1970s, starting with the direct election of mayors and chairpersons by universal suffrage. This change was ushered in following the 1975 Law on Direct Elections Local Authorities, which went into effect in 1978. Since then, the country has aimed to improve public administration and enhance accountability, transparency and financial responsibility of local governments. The central government has also gradually withdrawn from delivering and overseeing local services. Some additional responsibilities have been transferred to local governments, for example, in the area of planning and building in 2014.

Today, local governments play an important role in providing primary and secondary education and social services. These are both delegated national services operated through local governments. Local governments also have compulsory responsibilities in several areas and they can also carry out voluntary tasks.

On the revenue side, local governments derive their income from two main sources: taxation and intergovernmental transfers in the form of grants and subsidies. Compared to OECD average, the share of taxation in local government revenues is high for a country having a centralised system of governance. Tax revenues accounted for 44% of local government revenues in 2016 (OECD, 2018<sup>[1]</sup>), which is above the average of OECD unitary countries (38.7%). However, tax revenues amounted to only 2.5% of GDP in 2016 (vs 4.7% in OECD unitary countries on average) and 9.5% of public tax revenues (vs 19.8%). In addition, while tax revenues include both shared and own-source taxes in most OECD countries, in Israel, all local taxes are own-source. Moreover, another characteristic of Israel is the high concentration of local tax on one tax, the property tax (*Arnona*), raised both on residential and non-residential land and buildings. In the OECD, only Australia, the United Kingdom, Ireland and New Zealand – all countries having strong Anglo-Saxon traditions - are in the same situation, where the property tax is the main, if not the only, local tax. Finally, Israel also stands out from other OECD countries concerning the method of calculating the value of the property tax bases. Israel is among the few OECD countries that still use area-based

assessment (e.g. Czech Republic, Poland, Slovak republic) while the vast majority of OECD countries now take into consideration the property value (rental or market value) as shown in Annex1.

In this context, any project to reform the *Arnona* is both sensitive and challenging. Reforming the *Arnona* may have a strong impact not only on the local taxation system but beyond, on the whole municipal finance system, as *Arnona* is a crucial source of total local income.

This is one of the reasons why the system has not evolved much since the creation of the modern *Arnona* in 1948. There have been however some discussions and proposals for reform. In 1981, a National Committee for Local Authorities Affairs, set up by the Knesset and the ministry of finance, proposed to create a business tax, replacing the non-residential *Arnona*, and which would be based on a local value-added tax - VAT (Zanbar report). In 1995, an Inquiry Committee on the Structure of the *Arnona* established by Tel Aviv City Council also proposed to create a local VAT to replace the *Arnona* raised on businesses (Daran, 1999<sup>[2]</sup>). Finally, in 2007, the “Barzilai Commission”, appointed by the Ministry of Interior in 2007, confirmed the need for structural changes. The unpublished report contains two alternative proposals (replace the *Arnona* by a share of the VAT; or, move towards a calculation method based on property value) but none of these proposals were implemented.

In the meantime, several measures have been adopted over the years which, actually resulted in “hardening” the *Arnona* system while reducing municipal taxing power over the tax. First, while until 1960 the *Arnona* was based on the rental value of the property, this was changed in 1960 to take into consideration the number of rooms (residential area) and the area (non-residential area). Ten years later, the system changed again, and since 1970 *Arnona* rates are based on the measured surface area of all properties. Second, through the mid-1980s, local councils had the authority to set their own *Arnona* rates. However all *Arnona* rates have been frozen in 1985 by the Knesset that enacted the Economic Stabilization Law (5745-1985). Current rates are still those of 1985, with two exceptions: changes in rates must be requested by a municipality and authorised by the Ministers of Finance and Interior; and, since 1998, inflation is taken into account into *Arnona* rates.

This situation has created or exacerbated several deficiencies of the property tax system. It has increased fiscal disparities among municipalities and has several negative consequences on the capacity of municipalities to provide adequate and equitable access to economic and social infrastructure and services across the country as well on local economic development.

There are two main deficiencies to the current *Arnona* system. The first one is the assessment and valuation method based on area and not on value. This area-based system introduces distortions between different types of business and among households, resulting in inequities both across households and between areas. Efforts to reduce these inequities have resulted in a local tax system that lacks transparency and is highly complex.

The second major deficiency is the significant unbalance in the level of tax rates between the *Arnona* on residential and non-residential *Arnona*. High rates of the business *Arnona* generally provide significant tax revenue while businesses do not consume lot of municipal services. By contrast, low rates of the residential *Arnona* provide low returns while inhabitants, who need more local public services, are more costly for the municipal budget. The marginal inhabitant is deficit-creating for the municipality. For many municipalities, receipts from the residential tax are insufficient to cover the costs of local public services provisions (education and welfare), to finance and maintain the adequate infrastructure required by residents as well as to develop new housing programmes (OECD, 2018<sup>[3]</sup>; OECD, 2017<sup>[4]</sup>). This adds to the severe housing shortage that they face.

This represents a big challenge in municipalities that do not have companies on their territory able to compensate for this low level of residential tax receipts, or which are not enough attractive for businesses.

In addition to being regressive and increasing fiscal disparities between poor and richer municipalities, this situation has also some other adverse effects. For example, municipalities tend to build business areas to

attract more business taxpayers, instead of providing access to basic services and developing housing and other infrastructures for citizens. It results in the multiplication of business areas and in a lack of housing supply, whose costs increase substantially.

Some reforms have already been taken by the Israeli government to improve the situation, in particular reduce fiscal disparities between municipalities. For example, in 2017 the government created an equalisation fund, the *Arnona* fund, to redistribute resources across municipalities more equally. In local Arab municipalities in which this issue is particularly sensitive, a special five-year plan, including special budgetary allocations in many sectors, also aims at reducing disparities among municipalities (OECD, 2018<sub>[3]</sub>).

Nevertheless, these reforms remain insufficient to reduce distortions and it seems necessary to go further by reviewing the *Arnona* system itself and not only compensating the negative effects of the system by punctual measures. The time for more substantial reform seems to come, both to reduce adverse effects but also to help municipalities carry out more effectively their tasks.

In this perspective, the Ministry of Finance of Israel has requested the support of the OECD to provide an in-depth diagnosis of the situation of *Arnona*' system in an international comparative perspective, and develop recommendations to improve the efficiency and equity of the system. To carry out the work, the OECD has conducted a mission in Israel in February 2019 with two international experts on subnational public finance and taxation to meet key stakeholders. Deskwork, data analysis and review of international practices have also been carried out to produce the following synthesis report. The report includes three main chapters: the first chapter provides a review of the system of local government finance in Israel, with a focus on the *Arnona*. The second chapter presents a diagnosis of the major problems with the *Arnona* and, beyond the financing of local governments in Israel. Chapter 3 suggests a set of 13 policy recommendations.

On the whole, the recommendations are motivated by a desire to improve local government finance in Israel along a number of important dimensions:

- Increasing economic efficiency by reducing distortions created by the *Arnona* system,
- Increasing the horizontal and vertical equity of the *Arnona* both within and among local governments,
- Simplifying and increasing the transparency of the system of local government finance
- Enhancing the effectiveness of the public services provided by local governments
- Providing local governments with increased autonomy over their fiscal affairs while also making progress on national goals of improving education, reducing poverty, increasing social welfare, and enhancing environmental quality throughout Israel.

The 13 OECD policy recommendations that follow are divided into two distinct sections. The first eight policy recommendations are designed **to improve the existing *Arnona* system**. Priority is given to changes in the *Arnona* system that are actionable and could be adopted and implemented relatively quickly. Once they are implemented, they should begin to produce results in terms of the criteria of an effective system of local public finance.

The final five policy recommendations represent **a blueprint for reforming more substantially the system of local government finance in Israel**. The centre piece of this reform is the establishment of a value-based system of local property taxation applied to both residential and non-residential property.

# 1 The Israeli system of local government finance

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Chapter 1 describes the structure, role and functions of local governments in Israel. It highlights their expenditure responsibilities and the structure of revenues used to finance both their regular and capital budgets. It provides comparisons with other OECD countries concerning in particular the importance of taxation as a revenue source, and the role played by property taxes. The chapter then focuses on the Israeli property tax (*Arnona*), describing how it functions and illustrating the large revenue disparities it generates across municipalities. The final section of the chapter describes the Israeli system of grants to local governments, focusing particularly on education and social welfare grants, the balancing grant, and the Equalisation Fund grant.

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Israel is a unitary parliamentary democracy established in 1948 by the Declaration of the Establishment of the State of Israel. Israel has no formal written constitution but thirteen “Basic Laws” (and a temporary one) that were passed in 1957 to set up a legal framework. Israel has two levels of governments, the central level and the local level. Local governments are governed by British colonial Municipal Ordinances of 1934 and 1941 that are still in place.

Although having only one level of local government, this level is quite diverse. It is composed of different categories of local councils mostly based on demographic size. In addition, local governments are further classified according to their population characteristics, socio-economic characteristics (clusters defined by the Central Bureau of Statistics) and fiscal wealth and budgetary performance characteristics. These classifications may have some impacts on public policies applied to municipalities according to their category, resulting in some kind of asymmetric decentralisation.

The role that local governments play in the provision of public services in Israel is somewhat ambiguous, as it will be described below. Overall, compared to other OECD countries, Israeli local governments have little spending responsibilities. In addition, these have been declining as a share of GDP between 2004 and 2011, stabilised between 2012 and 2015 and increased since, still at a lower level than in 2004. Local expenditure is funded quite equally by tax revenue and grants and subsidies from the central government, which is quite uncommon in a centralised country, where in general local governments tend to rely more on grants and subsidies from the central government. Also quite uncommon, except in countries having strong Anglo-Saxon traditions, the property tax (*Arnona*) is the main component of local tax revenue, although there are large differences in the ability of local governments to raise revenue from their own source. The *Arnona* has also several unique qualities that make it quite different from property taxes typically used by local governments throughout the world. By contrast, the system of grants and subsidies is mainly based on block and matching grants for education and social welfare while equalisation grants (general balancing grants and new equalisation fund) remain limited.

## Local governments in Israel

Israel is a unitary country. It is one of 10 OECD countries with only one level of subnational government. All other OECD countries have two or three levels, such as states, regions, counties, and municipalities. Its 257 local governments can be divided in four categories:

- *77 municipal councils (cities)*. These are urban jurisdictions with at least 20 000 inhabitants. 76% of the country’s population (6.3 million residents) reside in municipal councils.
- *124 local councils*. These jurisdictions have fewer than 20 000 inhabitants. 15% of the country’s population (1.2 million residents) reside in local councils.
- *54 regional councils*. Regional councils are responsible for governing a number of settlements spread across rural areas (mainly *kibbutzim* and *moshavim*). About 10% of Israel’s population (750 000 residents) are governed by regional councils.
- *2 industrial local councils*. These councils are composed entirely of industrial zones and thus have no residents.



Most local governments in Israel can be characterised as mostly inhabiting Jewish or mostly Arab population. In 2016, 163 local governments were predominantly Jewish and 85 were predominantly Arab. The remaining 7 local governments were either mixed or in a few cases, mainly Druze or Christian (CBS, 2019<sup>[1]</sup>).<sup>1</sup>

In 2017, the population of local councils ranged from 1 200 residents in the smallest council to 901 300 in the largest council (Jerusalem). Table 1.1 displays the distribution of local governments by population size. The median sized local government has a population of 14 400 and half of Israel's local governments have populations between 10 000 and 50 000. As shown in Figure 1.1, based on 2016 data, the average Israeli local council had a population of 33 514, a figure that is 3.5 times higher than average local government population size in OECD countries.

Nine local councils in Israel (3.5% of the total) are very small, with populations of less than 2 000. In the majority of the 35 OECD member countries, the share of local governments with fewer than 2 000 residents is substantially higher. In 11 countries more than 50% of local governments have populations below 2 000 and in four countries over three-quarters of local governments are very small, with populations under 2 000 (OECD, 2018<sup>[2]</sup>).

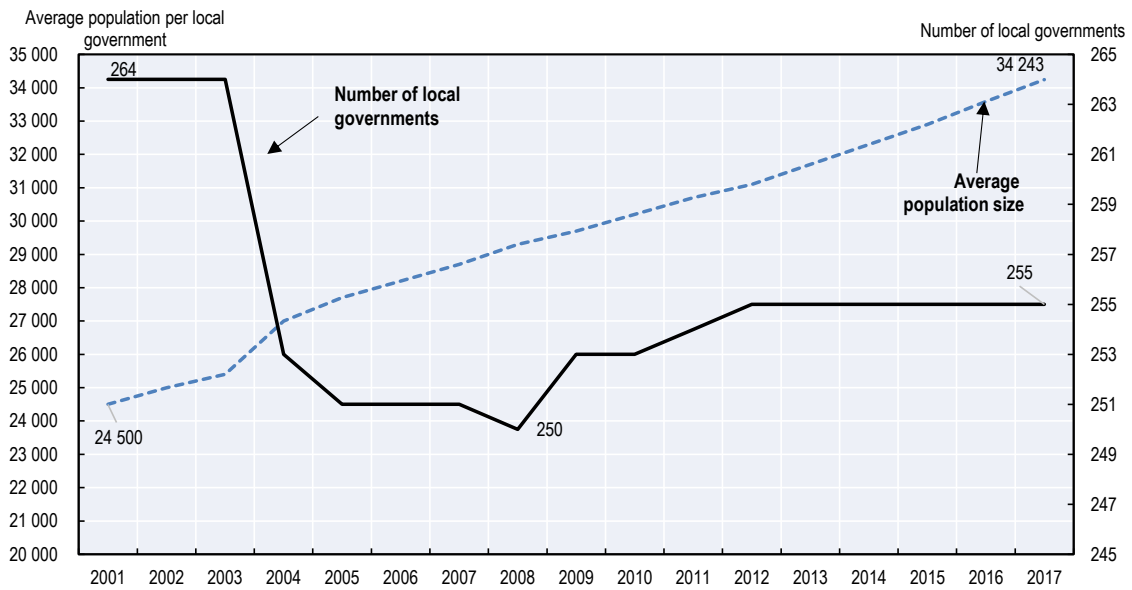
**Table 1.1. Local governments by population size, 2017**

Population size	Local governments
Less than 2 000	9
2 000-4 999	24
5 000-9 999	59
10 000-14 999	37
15 000-24 999	48
25 000-49 999	42
50 000-99 999	20
100 000-249 999	13
250 000 and above	3
<b>Total</b>	<b>255</b>

Source: OECD calculations using Central Bureau of Statistics local government data, 2017 (<https://www.cbs.gov.il/en>).

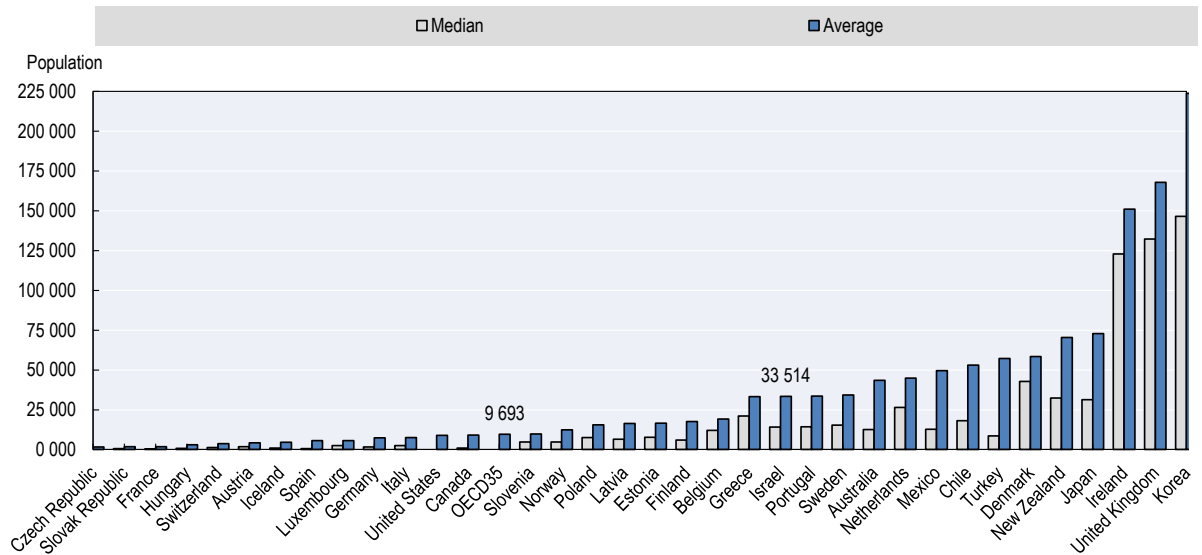
Several attempts have been made to reduce the number of local councils through mergers. In 2003, 23 local councils were consolidated into 11. As can be seen in Figure 1.1, in subsequent years some of these unions were annulled. Since 2012, the number of local governments has remained unchanged at 255. Consequently, as Israel's population grows, the average number of residents per local government has grown. In 2017, the average size local council had a population of 34 243, an increase of nearly 40% since 2001. Figure 1.2 illustrates the wide range in average and median size of municipal governments in OECD countries. In 2016, average municipal size in OECD countries ranged from 1 688 in the Czech Republic to 223 782 in Korea (OECD, 2018<sup>[3]</sup>; n.d.<sup>[4]</sup>).

Figure 1.1. Number of local governments and average population per local government



Source: OECD calculations using Central Bureau of Statistics local government data, 2017 (<https://www.cbs.gov.il/en>).

Figure 1.2. Median and average municipal size (number of inhabitants) OECD Countries, 2016



Sources: OECD elaboration based on OECD (2018<sup>[3]</sup>), *Subnational Governments in OECD Countries: Key Data*, <http://www.oecd.org/regional/Subnational-governments-in-OECD-Countries-Key-Data-2018.pdf> (accessed on 16 May 2019)

In recent years, attempts have been made to establish voluntary associations of neighbouring local governments, called “clusters.”<sup>2</sup> Initially these were created through a “bottom-up” process, e.g. the Western Galilee Cluster in 2009. A pilot program to establish Voluntary Regional Clusters was created in 2012 under the initiative of the Ministry of Interior, the Ministry of Finance and several civil society organisations. Subsequent legislation passed by the Knesset formalized the legal status of clusters. At present (2019), 11 regional clusters have been established.

The existing clusters are mainly located in Northern and Southern Israel. About 12% of the Israeli population and 120 local governments are members of these regional clusters. Clusters operate in very different ways. Some clusters are run by an Assembly composed of representatives from the local councils. They rely on voluntary contributions from member local governments to finance specific projects of common interest. This type of cluster thus requires a double agreement from each local government. First, an agreement to join the cluster and then a separate agreement to participate in each project. The Western Galilee Cluster provides an alternative model for the operation of clusters. That cluster is made up of 18 (rather small) local councils with a total of 200 000 residents living in 115 different communities spread over 2 000 square kilometres. The cluster itself has been given responsibility for specific services including environmental protection, waste removal, and veterinary services. The cluster also provides specialized education programs, which supplement the education programs provided by municipal governments.

The Israeli clusters are quite similar to the French inter-municipal syndicates with multi-purpose (*Syndicats intercommunaux à vocation multiple*). Box 1.1 provides a brief history of French efforts to encourage cooperation in public service provision among neighbouring local governments. The French experience highlights both the benefits and the difficulties in establishing cooperation among local governments.

### Box 1.1. A brief look at the French experience with the inter-municipal cooperation structures

Local government is highly fragmented in France, with 36 000 communes with an average population size of only 1,900 inhabitants. Since the mid-nineteenth century there have been numerous attempts to merge small municipalities. All these attempts failed. Unable to take advantage of economies of scale in the provision of local public services, municipalities began creating inter-municipal associations, called syndicates which can be single or multi-purpose). These syndicates functioned on a pure voluntary basis. Municipalities made a voluntary decision to join the syndicate and a voluntary fiscal contribution to the expenses of the syndicate). But an increasing number of these municipalities chose to go further and decided to share a tax base in order to secure and to enlarge their cooperation. After several attempts, a new decisive step was taken in 1999. New types of inter-municipal bodies were created under the form of inter-municipal cooperation public bodies (*Etablissements publics de coopération intercommunale or EPCI*) in rural (*communautés de communes*) and urban areas (*communautés d'agglomération*). Later on, other bodies called *métropoles* were introduced. They were all based on a common framework. The municipalities that chose to join an inter-municipal body sent representatives to the inter-municipal assembly. The fiscal responsibilities of the municipalities and the inter-municipal body are distributed between the two tiers (although sometimes both tiers retain responsibility for a public service). The power to tax local business (using the local business tax - *taxe professionnelle* -, which had generated more than 50% of local government tax revenues) was transferred to the new inter-municipal bodies named *EPCI à fiscalité propre* (inter-municipal cooperation structures with own-source taxes). The tax revenues newly available to inter-municipal bodies was used for three purposes. First, it financed a fiscal transfer to the municipalities *in lieu* of the foregone tax revenues; second, it financed the provision of inter-municipal public services, and third, it funded an inter-municipal fiscal equalisation fund. In order to incentivise local governments to join these new inter-municipal cooperation structures, the municipalities received a fiscal bonus from the central government. As these bonuses were financed out of the (close-ended) overall amount of transfers from the central government to local governments, they were quite successful. In only a few years, almost all French municipalities chose to enter these new inter-municipal bodies. As of January 2019, there were 1 258 inter-municipal bodies with own-source tax including all French municipalities. In addition, nearly 1 900 municipalities decide to merge into 567 “new municipalities” as of January 2018 (*communes nouvelles*). This arrangement of “new municipality” allows the abolished municipalities in a merger process to remain and retain some specificities such as a delegate mayor, a town hall (annex), an advisory council, which function as deconcentrated localities.

On the whole, positive lessons can be drawn from the French experience. A decisive step has been made towards more integrated local governments in France. A large part of local governments' responsibilities are now provided at the inter-municipal level. The residents have access to a larger range of local public services than in the past. The coordination of local public decisions is made easier.

But there are also less positive lessons. As in most cases municipalities have not disappeared, the number of local governmental bodies has increased. The local democratic process still relies on the direct voting of residents at the municipal level and the democratic legitimacy of the inter-municipal bodies is less clear. The integration of municipalities in fully democratic supra-municipal bodies has yet to be achieved, and it is not on the political agenda at present.

Moreover, the responsibilities of municipalities and inter-municipal bodies are partially overlapping, increasing the overall cost of the provision of local public services. The inability or unwillingness to fully exploit economies of scale has thus led to higher local taxes.

Thanks to these recent reforms, France is now moving towards a reduction in the number of municipalities and a complete integration of municipalities into two-tier inter-municipal bodies. However,

additional steps need to be taken to reinforce local democracy and improve economic efficiency in the provision of local public services.

Sources: Gilbert, G. (2012<sup>[5]</sup>), "Beyond inter-municipal partnerships towards two-tiers municipalities: The case of finance", *IEB's World Report on Fiscal Federalism 09*, pp. 26-35; OECD (2017<sup>[6]</sup>), *Multi-level Governance Reforms: Overview of OECD Country Experiences*, <https://doi.org/10.1787/9789264272866-en>; OECD/UCLG (2019<sup>[7]</sup>), *2019 Report of the World Observatory on Subnational Government Finance and Investment, Country Profiles*, <http://www.sng-wofi.org>.

## The role and functions of local governments in the Israeli fiscal system

### ***Expenditure responsibilities of the local government sector in Israel***

The role that local governments play in the provision of public services in Israel is somewhat ambiguous. Israel has no written constitution, and hence local governments have no formal or permanent status in the Israeli fiscal system. Compared with many OECD countries, local governments in Israel have very limited power and control over both their expenditures and revenues. Over the years, the Knesset has enacted legislation that assigned responsibility for the provision of some services to local councils. The largest share of local government spending, however, is associated with functions, namely education and welfare, that the central government has delegated to local councils. Subject to resource constraints, local councils can supplement spending on these functions beyond the level that is directly financed by the central government. In addition to these shared functions, local governments have some discretion to finance public services and public investment beyond those that are delegated or mandated by statute. The central government sometimes refers to these public services as "voluntary." Table 1.2 provides an overview of the major functions carried out by local governments in Israel. The expenditure functions are divided into those mandated by statute, those that are delegated functions, and those that are discretionary.

**Table 1.2. Expenditure responsibilities of local governments**

Statutory responsibilities of local governments	Central government delegated functions	Discretionary functions of local governments
Sanitation	Education	Cultural activities
Water and sewer	Public welfare (except health)	Informal education
Public parks	Religious services	Libraries
Local road maintenance	Day-care	
Veterinarian services		
Facilities for sports and culture		
Government administration		

Source: Ministry of Finance.

Local government budgets are expected, first and foremost, to provide for public services in the areas of their statutory responsibilities and for the budgeting of matching funds for the provision of dedicated national services. If some budget remains, the local council is allowed to spend it on discretionary services and/or on "topping up" expenditures on delegated public services, primarily education and social services.

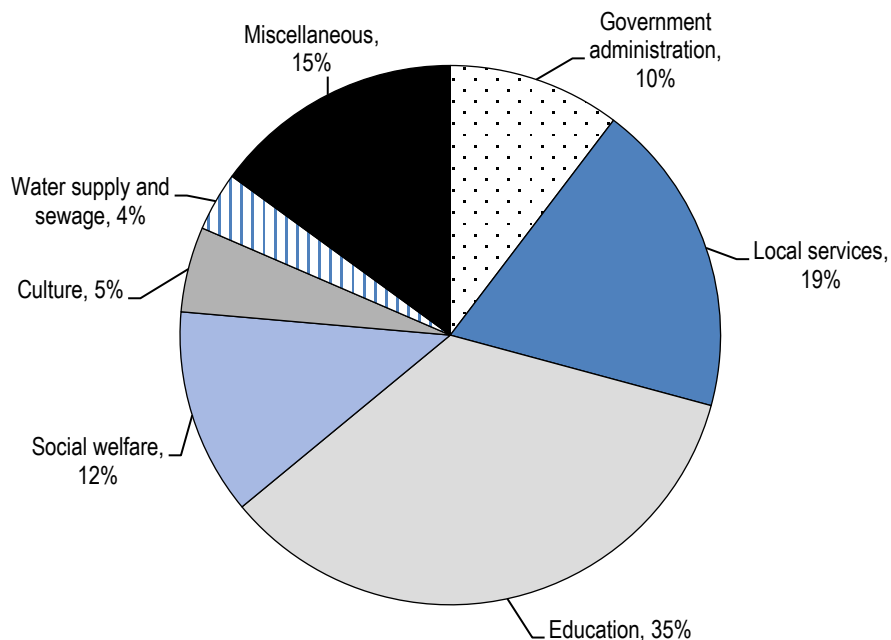
Although the central government plays an important role in financing local government services in many OECD countries, the ability of the central government to tightly control local governments' activities and

actions is much more extensive in Israel than in many other unitary countries. The powers of the Minister of the Interior over local governments are extensive. The Minister has the authority to approve budgets, to approve or deny changes in local property tax rates, the power, under certain circumstances, to terminate local elected official, and approve bi-laws passed by local councils (Wittes, 2018<sup>[8]</sup>).

Although the central government places significant constraints on local government behaviour, local governments play an important role in providing public services in Israel. As seen in Table 1.2, local governments are responsible for delivering to local residents a wide range of public services. The current operating expenditures of local governments are found in their *regular budgets*, while spending on capital infrastructure is found in local governments' so-called *irregular budgets*. The pie chart in Figure 1.3 illustrates how the regular budget of local governments was allocated among various expenditure functions in 2017.

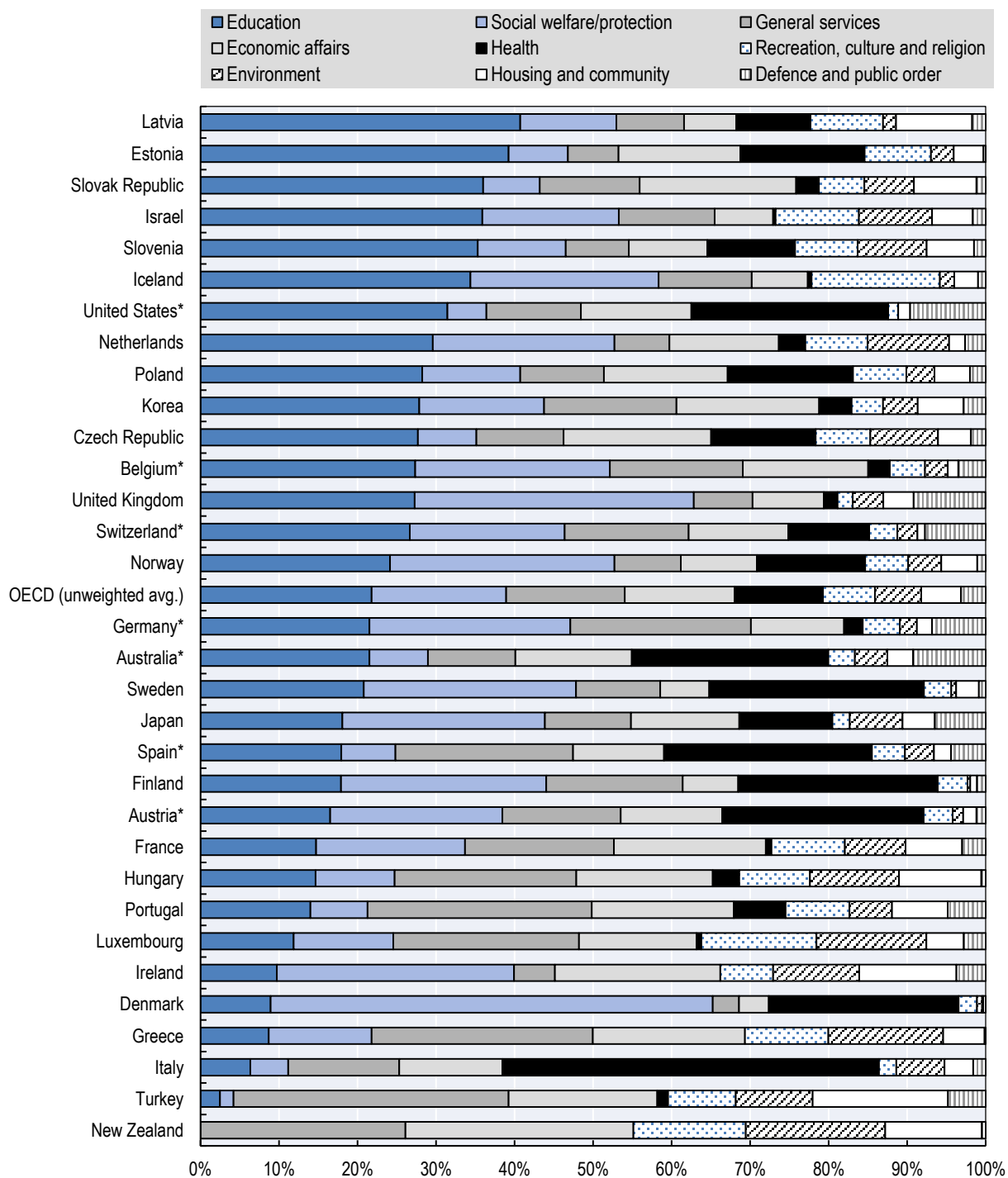
Over one-half of total spending is devoted to spending on public services delegated to local governments by the central government. A little over a third of spending is for education. The rest of the local budget is divided among government administration and the provision of the services listed in Table 1.2. Figure 1.4 allows for the comparison of the mix of spending by function in Israel with the mix of spending by subnational governments in most of the OECD countries. The data show that local governments in Israel devote a much higher proportion of their total spending to education than most OECD countries. The share of spending on recreation, culture, and religion is also considerable above the OECD average. Figure 1.4 also makes clear that while most subnational governments spend considerable amounts on health and on public order (especially on police and fire protection), local governments in Israel spend almost nothing on those functions, because they remain the direct responsibility of the central government.

**Figure 1.3. Local government spending by function, regular budget, Israeli municipalities, 2017**



Source: OECD calculations based on CBS data (<https://www.cbs.gov.il/en>).

Figure 1.4. Subnational government spending by function, OECD countries, 2015



\* Denotes non-unitary countries.

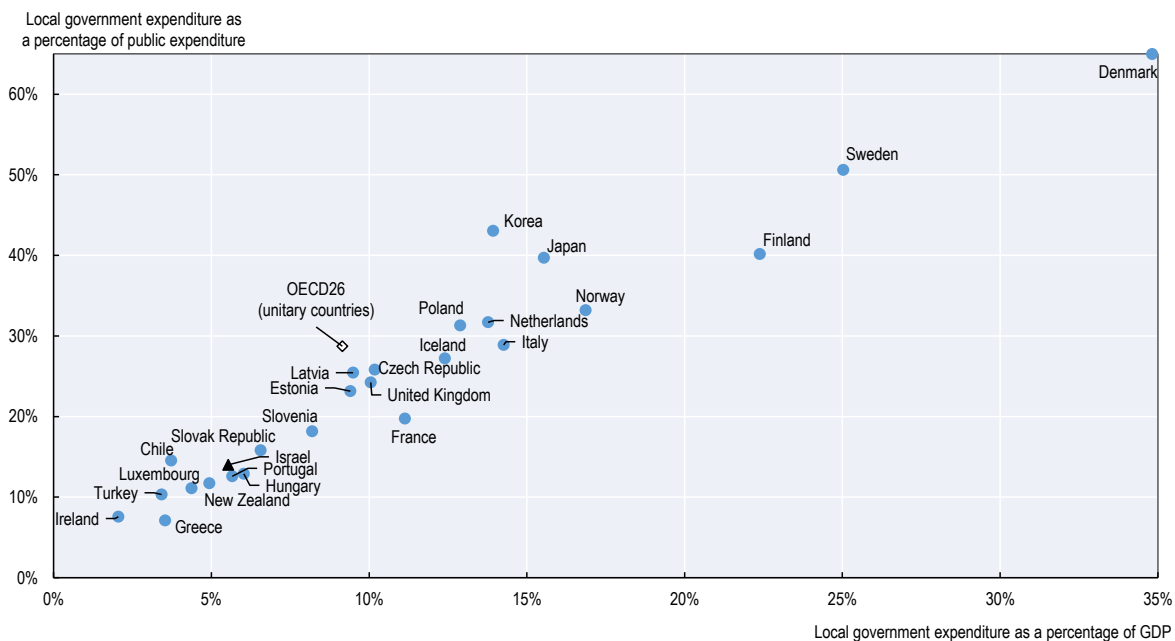
Note: Data unavailable for Canada, Chile, and Mexico.

Sources: OECD elaboration based on OECD (2018<sup>[3]</sup>), *Subnational Governments in OECD Countries: Key Data*, <http://www.oecd.org/regional/Subnational-governments-in-OECD-Countries-Key-Data-2018.pdf> (accessed on 16 May 2019).

### ***The economic size of the local government sector in Israel***

Figure 1.5 focuses on OECD countries with unitary governments, and shows that local governments' share of total government spending range from 7% in Greece to 65% in Denmark. The local government share is 14% in Israel, somewhat below the average among all unitary governments (28.7%). Figure 1.5 also displays local government spending relative to GDP in OECD countries with unitary governments. It is not surprising that local government spending in Israel is only 5.5% of GDP, near the low end among unitary countries and well below the OECD average for unitary countries.

**Figure 1.5. Local government spending as a percentage of GDP and total general government spending, OECD unitary countries, 2016**



Note: 2015 data for New Zealand and Turkey.

Sources: OECD elaboration based on OECD (2018<sup>[3]</sup>), *Subnational Governments in OECD Countries: Key Data*, <http://www.oecd.org/regional/Subnational-governments-in-OECD-Countries-Key-Data-2018.pdf> (accessed on 16 May 2019).

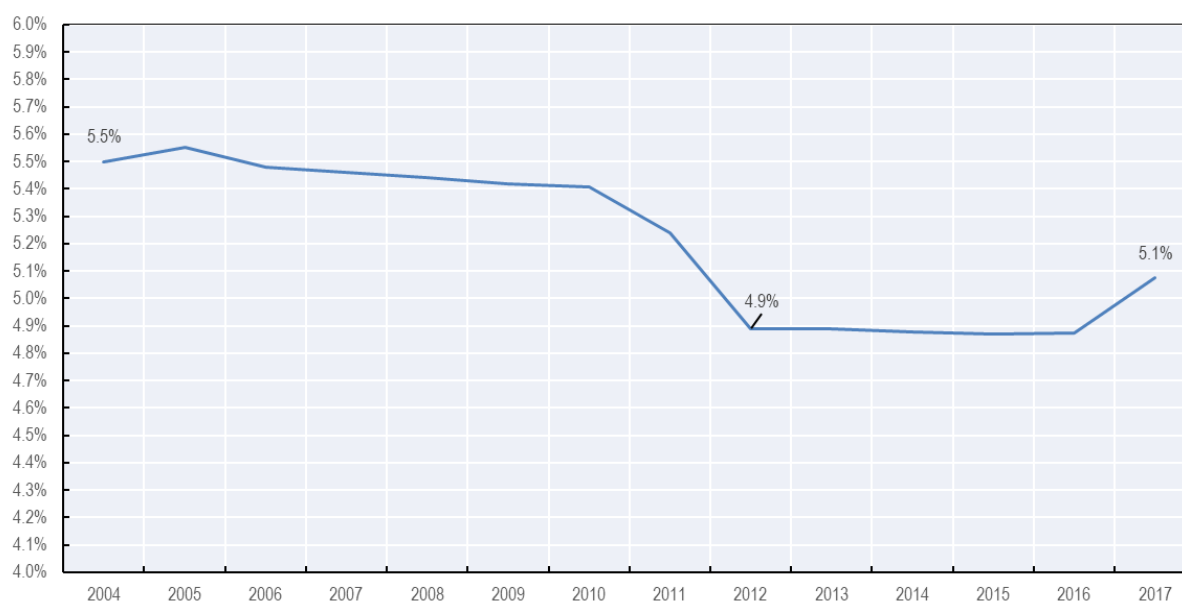
### ***Reductions over time in local governments' operating budgets as a percentage of GDP***

In 2005 the regular budgets of Israel's local governments totalled 5.5% of GDP. After a slight uptick in 2006, the aggregate size of local governments operating budgets declined steadily relative to GDP until they reached a level of 4.9% of GDP in 2012. As illustrated in Figure 1.6, between 2012 and 2016 local government budgets grew proportionally to the country's GDP. In 2017, regular budgets of local governments increased to nearly 5.1% of GDP.

Despite this recent increase, the total of the regular budgets of local governments remained (in 2017) 0.4% below their level in 2004. This difference is significant. If in 2017, the regular budgets of local government had been equal to 5.5% of 2017 GDP, they would have been 69.9 billion NIS, or 8.4%, higher than they actually were. In per capita terms, if the operating budgets of local governments 2017 were the same proportion of GDP that they had been in 2004, per capita spending in 2017 would have been 618 NIS higher than it actual was.



Figure 1.6. Local government regular budgets as a percentage of GDP



Source: OECD calculations using CBS local government data (<https://www.cbs.gov.il/en>).

Box 1.2 explains why the government went through a period in which it constrained sharply the growth in government spending at both the national and local government levels. The box also outlines the actions taken to constrain the budget growth of local governments.

Since 2014, local governments have been classified according to several budgetary performance criteria related to fiscal stability. “Stable” local governments that fulfil standards have been granted more independence from central authorities, and are exempted from obtaining approval with respect to wages, hiring, bank loans, enactment of municipal by-laws and other regular operations. As of 2018, 24 councils met these criteria. Conversely, authorities that fail to meet the standards are put under administration (the “fiscal rehabilitation” programme) and are run by a state accountant. Despite substantial improvements in the budgetary discipline of councils since 2004, there are still many councils under the central government’s rehabilitation programme.

### Box 1.2. Government policies to reduce local government budgets

The contraction of the government's share of GDP over the past 20 years was accompanied by major reductions in country's budget deficit and a substantial lowering of the public debt-to-GDP ratio. While, two decades ago, debt amounted to 90% of GDP, today's ratio is 60%. This lower-debt-to GDP ratio was a result of a policy of fiscal discipline that has characterized the state budget in recent years. The government imposed strict spending rules at the end of the last decade in order to reduce government spending, and it lowered the deficit ceiling. As a result the deficit fell from the 3% to 6% range (as a percentage of GDP) during most of the relevant period to 2% to 3% of GDP in the last few year (OECD, 2018<sup>[2]</sup>; Bental and Brand, 2018<sup>[9]</sup>).

The policies undertaken to reduce the deficit in 2004 included specific measures related to local governments. The central government intervened in local government fiscal affairs in three ways:

1. by appointing an accountant that had to approve each expenditure and provide reports directly to the Ministry of Finance
2. by imposing a *recovery plan* specifically tailored for each local government. These plans included a balanced budget constraint that was imposed for a specified number of years. The recovery plans included details on the type of expenditures to be cut, the workers to be fired, and the required increase in tax collection rates
3. by, in some cases, dismissing mayors and council members and replacing them with an appointed board.

These programs were instituted in more than 50% of the municipalities. The impact on expenditures of these programs is quite clear. Per capita local expenditures decreased significantly, primarily because of cuts in salaries of municipal employees and increases in local government tax collection rates. Ben-Bassat, Dahan, and Klor (Ben-Bassat, Dahan and Klor, 2016<sup>[10]</sup>) concluded that this program has proved to be an "effective tool to bring about a decrease in the municipalities expenditures without affecting the municipalities 'provision of local public goods" (p. 72).

Sources: OECD (2018<sup>[2]</sup>), *OECD Economic Surveys: Israel 2018*, [https://dx.doi.org/10.1787/eco\\_surveys-isr-2018-en](https://dx.doi.org/10.1787/eco_surveys-isr-2018-en); Bental, B. and G. Brand (2018<sup>[9]</sup>), "Economic developments in Israel: An overview", [http://taubcenter.org.il/wp-content/files\\_mf/economicdevelopments2018en.pdf](http://taubcenter.org.il/wp-content/files_mf/economicdevelopments2018en.pdf); Ben-Bassat, A., M. Dahan and E. Klor (2016<sup>[10]</sup>), "Is centralization a solution to the soft budget constraint problem?", <http://dx.doi.org/10.1016/j.ejpoleco.2016.09.005>

## The financing of local governments' budgets

### *The financing of local governments' regular budgets*

The regular budgets of local governments in Israel, as in most other countries, are financed from a number of sources, including taxes, user fees and charges, and grants from the central government. Total local government revenue in Israel equalled 5.6% of GDP in 2016. This figure is relatively low compared to the OECD average of unitary countries of 12.3%. This level of local government revenue reflects the fact that Israel's total government revenue as a percentage of GDP is below the OECD26 average (37.4% compared to 40.7% in 2016) and, as shown in Figure 1.7, local government revenue as a share of total government revenue (15%) is below the OECD average of 31.1%. Israel's relative position is not surprising. Israel is a unitary government and the central government retains responsibility for a number of functions such as public safety and health care that are local government functions in many other OECD countries.

Also, as discussed above, total government revenues as a share of GDP declined during the first decade of the 2000s and the growing importance of public enterprise operations has moved some public functions “off-budget”.

**Figure 1.7. Local government revenue as a share of total revenue and of GDP, OECD unitary countries, 2016**



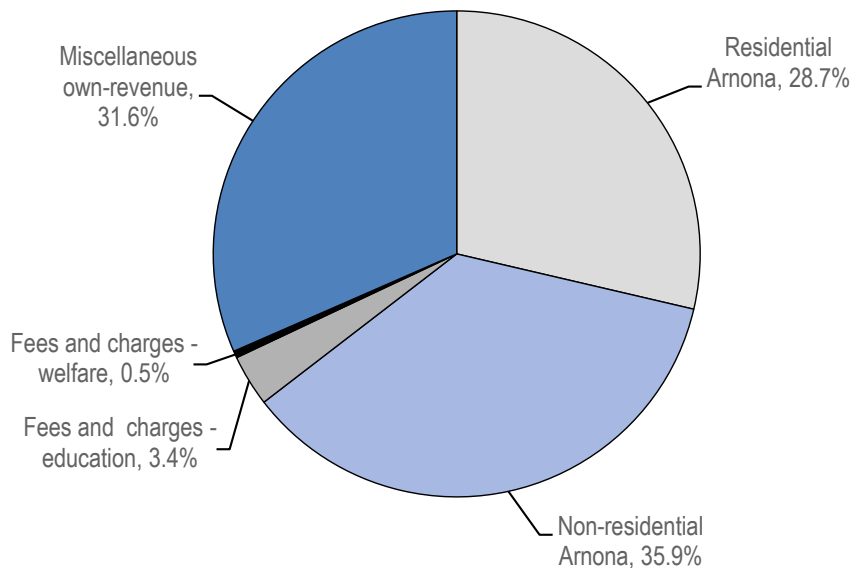
Sources: OECD elaboration based on OECD (2018<sup>[3]</sup>), *Subnational Governments in OECD Countries: Key Data*, <http://www.oecd.org/regional/Subnational-governments-in-OECD-Countries-Key-Data-2018.pdf> (accessed on 16 May 2019).

The revenue of local governments used to finance their regular budgets comes primarily from revenue raised directly by local governments (referred to as own-revenue, or in Israel as self-revenue) and revenue from the central government, primarily in the form of grants. In 2017, the regular budgets of local governments totalled 64.5 billion ILS. The largest share of this amount (59.3%) came from own-revenue. Grants contributed 39.7% and loans 1%.

Figure 1.8 shows the composition of own-revenues. For the country as a whole, 65% of own-revenues come from the property tax, referred to hereafter as the *Arnona*, with 56% of total *Arnona* revenue derived from the tax on non-residential property. Fees and charges associated with education and welfare account for 4% of own-revenue, with the remaining 32% coming from miscellaneous sources.

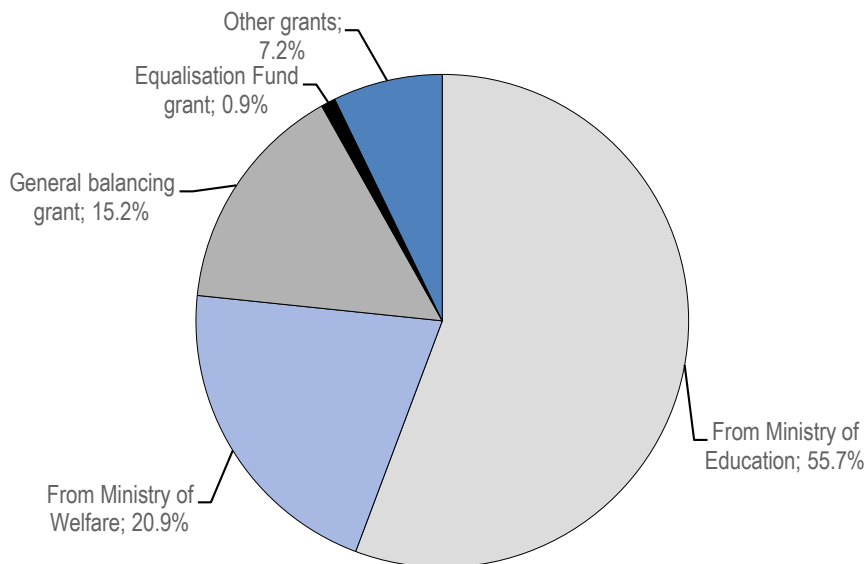
The distribution of government grants by type are displayed in Figure 1.9. The two largest grants are combinations of block and matching grants from the Ministries of Education and Welfare. These grants finance a large portion of local government spending on education and welfare. 15% of grant revenue comes through the General Balancing Grant. This grant is designed as an equalising grant targeted to local governments with limited amounts of own-revenues. Equalisation Fund grants are a new grant program initiated in 2017. It accounts for a little under 1% of grant revenue. The final 7% of grant revenues are allocated through a number of other grant programs. The grant programs will be described in more detail below.

**Figure 1.8. Distribution of own-revenue, 2017 regular budget**



Source: OECD calculations using CBS local government data (<https://www.cbs.gov.il/en>).

**Figure 1.9. Distribution of government grants, 2017 regular budget**



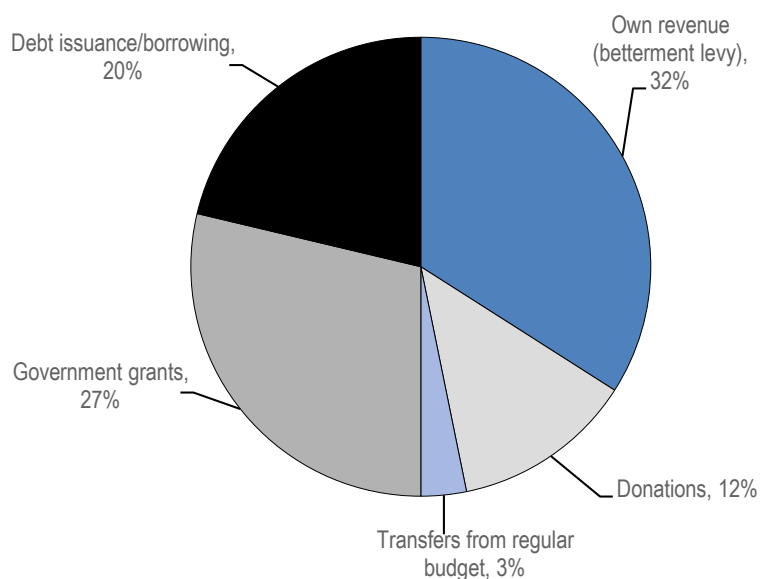
Source: OECD calculations using CBS local government data (<https://www.cbs.gov.il/en>).

### **The financing of local governments' irregular (capital) budgets**

Local governments in Israel maintain separate capital budgets, referred to as irregular budgets. Capital spending accounts for 21.1% of total local government spending, a percentage that is nearly double the OECD average of 10.7% (13.8% in unitary countries). OECD data indicates that 69% of public investment in Israel is carried out by local governments. This very high percentage, however, reflects the fact most central government investment in Israel is done by public companies whose investment is not recorded in official statistics as general government expenditures. As a result, the real extent of central government investment is substantially under-estimated, and consequently, the local government share is over-estimated. This is confirmed by the low level of local government investment in GDP (1.2% as compared to an average of 17% in OECD unitary countries).

In 2017, the irregular budget of all local governments was about NIS 17.7 billion, which is equivalent to 1.4% of GDP. According to local council law, the irregular budget is a “budget of a municipality that is intended for a nonrecurring activity or for a certain areas of activity that includes an estimate of proceeds and payments for that activity or for that area of activity and funds that were intended by law for purposes that are not [funded in the] ordinary budget” (Ministry of Finance, 2019<sup>[11]</sup>). In effect, the irregular budget is intended to fund capital investment projects, such as the construction and paving of roads, developing municipal parks, and the construction of schools and other public buildings. Irregular budgets are financed by grants from various central government ministries, the proceeds from the sale of local government assets, local taxes and fees authorized by central government legislation and municipal bylaws, transfers from local governments' regular budget, donations from various institutions, and from the issuance of debt (Figure 1.10).

**Figure 1.10. Sources of revenue for irregular budgets**



Source: OECD calculations using CBS local government data (<https://www.cbs.gov.il/en>).

Central government ministries transfer development budgets to local government where the funds are intended to finance local capital projects, such as the construction of school buildings. In most cases, government grants to the irregular budget of local governments are project grants that are intended for a specific project. Local governments are generally prohibited from using the grant funds for an alternative project.

The most important source of own revenue for capital projects comes from the betterment (or improvement) levy. When property values increase due to changes in zoning and land-use regulation or because additional building rights were granted, a betterment levy equal to half of the appreciated value of property is required of private land owners. No exemptions are permitted. Revenue from the betterment levy must be used solely for local government capital spending. It is complemented by the improvement levy substitute. This substitute is paid by the Israel Lands Authority, which is not required to pay the regular betterment levy. Revenue from the improvement levy substitute accounted for 12% of the proceeds from the betterment levy. Additional own revenue for the irregular budget comes from development levies. Municipal ordinances empower local governments to charge fees to developers. Revenues from the fees must be used to develop infrastructure that supports development, such as paving roads, building sewage lines, channelling and draining water, and developing open public spaces. Land sales constitute another source of financing. A local authority may use proceeds from the sale of properties it owned only for the purpose of buying new properties unless the Minister of the Interior permits other uses for the funds. The sale of the properties is only possible by a resolution passed by the municipal council, and as stated, with the minister's approval.

If a local council complies with its statutory duties related to its regular budget, it is permitted by law to transfer surplus funds from its regular budget to its irregular budget. Local governments irregular budgets also receive donations from institutions. The Payis (lottery), and some other enterprises allot resources to local councils, which the councils use for building public buildings.<sup>3</sup> Development debt is the last category of financial resources for the irregular budgets. Local governments are permitted, with the consent of the Minister of the Interior and the Minister of Finance, to issue debt (borrow) for funding capital projects included in the irregular budget. Note that debt is not a resource as such, but only a mechanism for financing public investments.

As illustrated in Figure 1.10, the transfers from the regular budget to the irregular budget are very limited (3% of total budgetary resources in 2014). This is not surprising if one considers that the regular budgets of a large number of local authorities are in deficit or hardly balanced. In other words, only the strongest local authorities are able to fulfil their “statutory duties funded by their regular budgets”. Consequently, as very few local governments are able to self-finance their capital projects, there is almost no direct link between the *Arnona* and the financing of local government investment.

There are, however, two indirect links between the *Arnona* and local public investments. First, investments in local public services generate recurrent operating expenses, which are mainly financed by *Arnona* revenues. So insufficient *Arnona* revenues combined with unfunded mandates make it impossible for local authorities to fully respond to their fiscal needs. Box 1.3 provides data from France on the magnitude of recurring (operating) costs associated with public investments. Second, a portion of capital expenditures are financed through debt. As debt service (interests plus capital repayments) is included in regular budgets, it is financed from *Arnona* revenues, and in some cases, with revenue from the balancing grant.

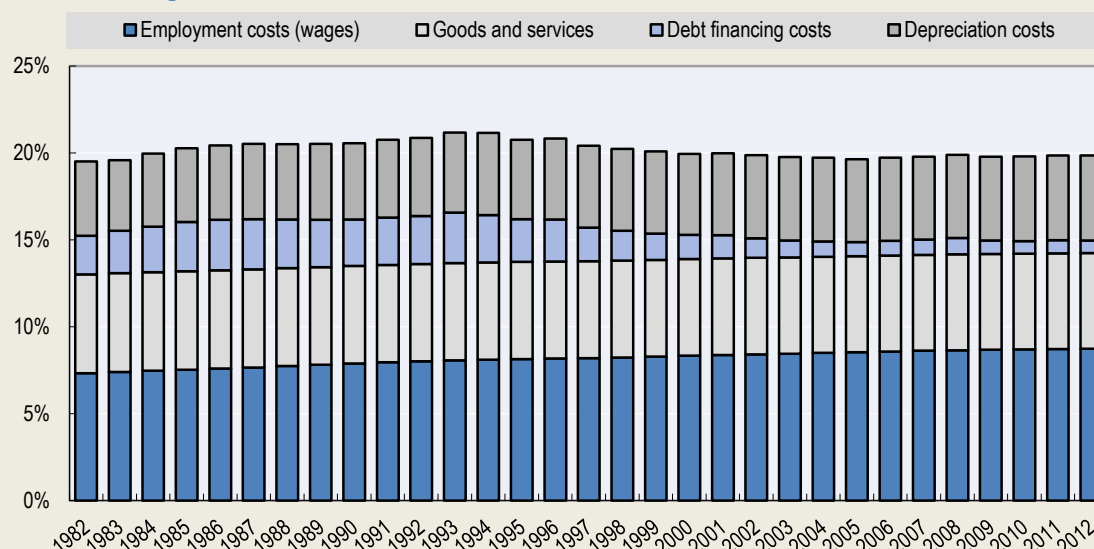
### Box 1.3. Recurrent costs associated with public capital investments

Some local public investments entail a reduction in operating costs. For example, installing insulation in public buildings reduces heating costs. Other investments generate additional fiscal resources through user fees or tolls. In general, however, local public investments generate net recurrent costs. Some costs are financial (debt repayment for example), while others are recurrent operating costs. New capital investments in equipment and buildings generally require additional employees, additional purchases of goods and services, including utilities, interest payments for debt financing, and additional depreciation expenses for future repairs.

The magnitude of recurrent costs relative to the size of an investment depends on the type of financing (debt finance or self-financing), and on the type of investment. In France investments in infrastructure (such as water networks, roads, rail tracks, bridges, or tunnels) require annual recurrent costs of 3% to 4% of the capital investment. Investments in buildings generally require higher recurrent costs. For example, a kindergarten entails annual recurrent costs equal to 30% to 35% of the investment.

In the period from 1982 through 2012, average recurrent spending in France as a percentage of public investments were highly stable. They averaged 11.2% for operating costs--6% for wages and 5.2% for purchases of goods and services, 4.3% for debt repayment, 3.7% for depreciation, and 0.6% for interest payments (Guengant and Le Meur, 2018<sup>[12]</sup>).

**Figure 1.11. Average recurrent costs as a percentage of public investment in the preceding year, France, all local governments, 1982-2012**



Source: Guengant, A. and Y. Le Meur (2018<sup>[12]</sup>), *Décrypter les finances publiques locales*, 3rd édition, Editions Le Moniteur, Paris.

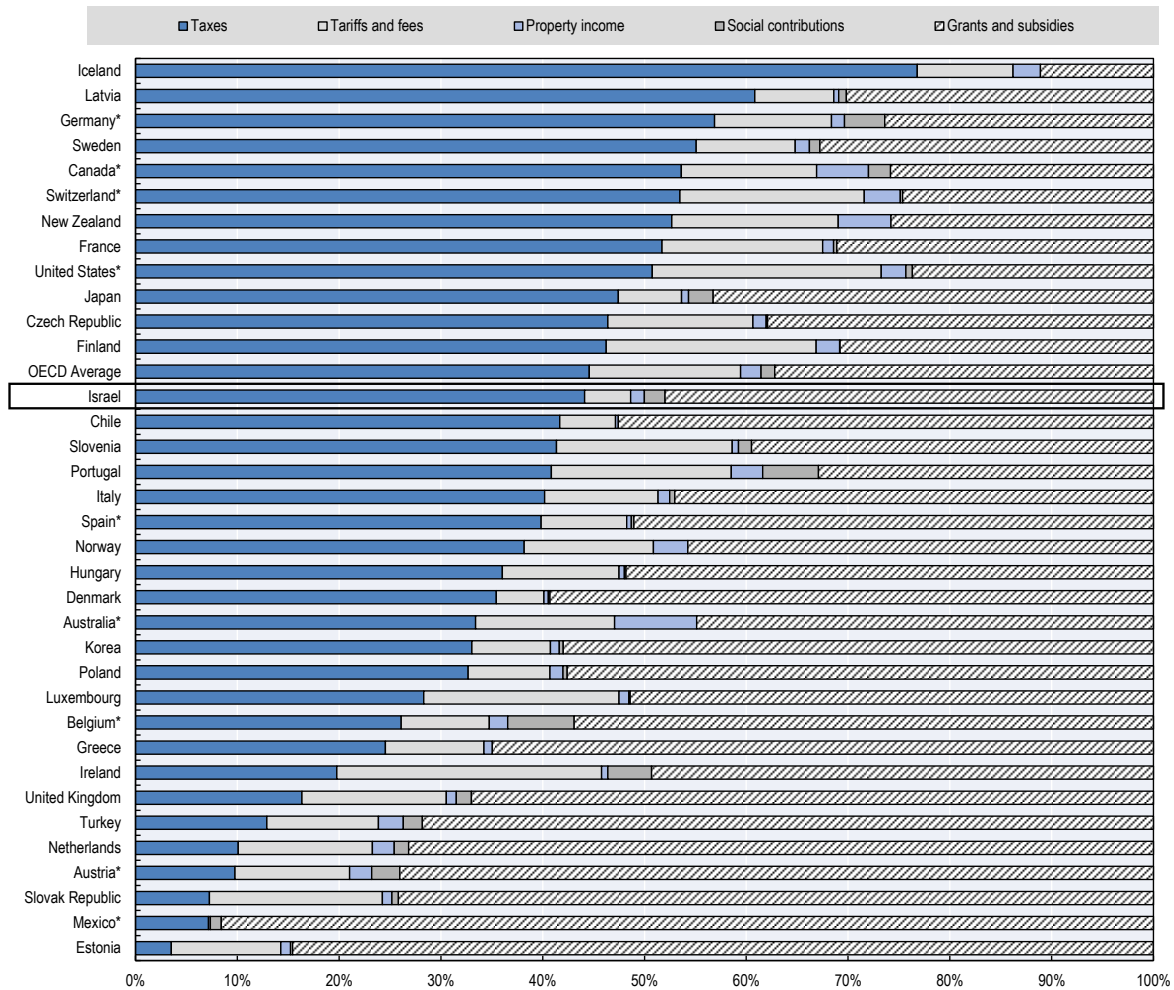
### Local government revenue comparisons with OECD countries

Figure 1.12 allows for the comparison of the distribution of the sources of revenue across OECD countries. The data are for all subnational governments, because sufficiently detailed data are not available for local governments alone. Countries are ranked by the share of total revenue coming from taxes. The share of revenue from all own sources is indicated by the length of each solid bar. The data show that local governments in Israel rely relatively heavily on tax revenues. On the other hand, Israel, relative to most

OECD countries, raises a small share of subnational revenue from user fees and charges. As a result, the share of self-revenue in the total revenue of local governments in Israel is about equal to the median share among subnational governments in OECD countries.

Although Figure 1.12 indicates that Israel’s share of tax revenue is about equivalent to the OECD average, it is important to note that the OECD average is influenced by countries, especially federations, which rely heavily on tax revenues raised by state or provincial governments.

**Figure 1.12. Subnational government revenue by source of OECD countries, 2016**



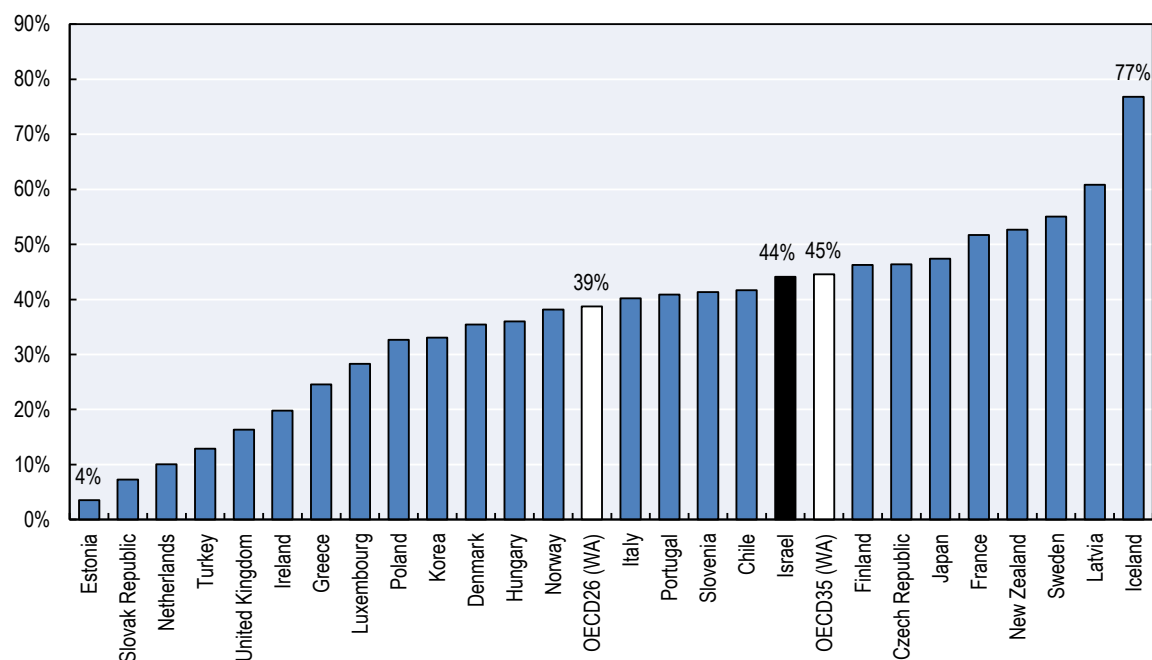
\* Non-unitary countries (federal or quasi-federal).

Sources: OECD elaboration based on OECD (2018<sup>[3]</sup>), *Subnational Governments in OECD Countries: Key Data*, <http://www.oecd.org/regional/Subnational-governments-in-OECD-Countries-Key-Data-2018.pdf> (accessed on 16 May 2019).



Figure 1.13 focuses just on OECD unitary countries. It shows that in Israel taxes account for 44% of the total revenue of local governments, a share that is substantially above the OECD average of unitary countries of 39% (OECD26) and on par with the OECD average for all countries (OECD35).

**Figure 1.13. Taxes as a percentage of total local government revenue OECD unitary countries, 2016**

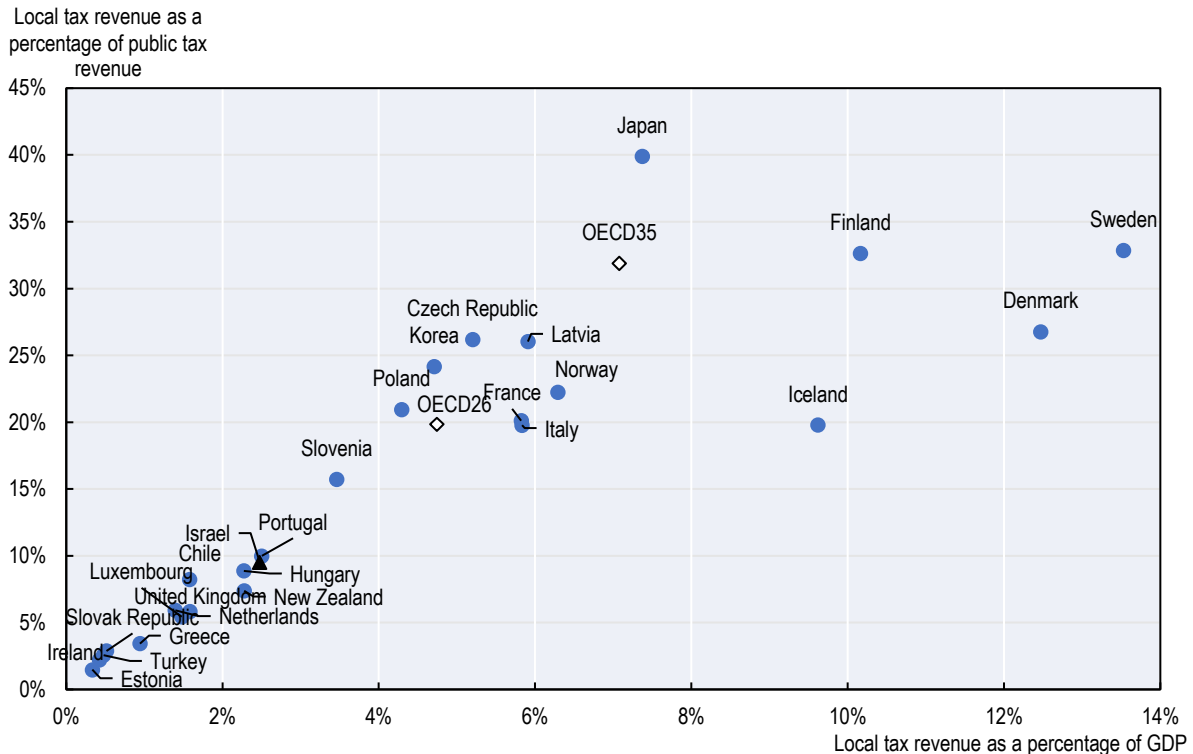


Sources: OECD elaboration based on OECD (2018<sup>[3]</sup>), *Subnational Governments in OECD Countries: Key Data*, <http://www.oecd.org/regional/Subnational-governments-in-OECD-Countries-Key-Data-2018.pdf> (accessed on 16 May 2019).

However, although tax revenues are a major source of local government revenues in Israel, they amounted to only 2.5% of GDP in 2016 (vs 4.7% in the OECD unitary countries on average) and 9.5% of public tax revenues (vs 19.8% in the OECD unitary countries on average) as shown in Figure 1.14.

One characteristic of Israel compared to other OECD countries is the high concentration of local tax on one tax, the property tax (*Arnona*). In the OECD, only Australia, the United Kingdom, Ireland and New Zealand – all countries having strong Anglo-Saxon traditions - are in the same situation, where the property tax is the main, if not the only, local tax. In other OECD countries, there is a great diversity of tax funding models through taxation. First, subnational governments can receive a share of national taxes; Second, they can raise a large variety of own-source taxes.

**Figure 1.14. Local governments tax revenue as a percentage of public tax revenue and GDP, OECD unitary countries, 2016**



Sources: OECD elaboration based on OECD (2018<sup>[3]</sup>), *Subnational Governments in OECD Countries: Key Data*, <http://www.oecd.org/regional/Subnational-governments-in-OECD-Countries-Key-Data-2018.pdf> (accessed on 16 May 2019)

### *Shared taxes in the OECD*

Subnational governments in many OECD countries receive a share of national taxes (personal income tax – PIT, corporate income tax – CIT, value-added tax - VAT, excise taxes, environmental taxes), either under the form of a portion of tax receipts redistributed according to a tax-sharing formula, which may include some equalisation mechanisms, or under the form of a surtax or a surcharge, which can be assimilated to a own-source tax if subnational governments have some power over the rate (see Box 1.4). “Tax sharing” should be distinguished from “tax revenue sharing”. Tax revenue sharing is a special case of intergovernmental transfer, the only difference with a block grant being that in the first case the tax revenue is specified and, in the latter, the tax revenues which are financing the transfer are not specified.<sup>4</sup>

Shared taxes are frequently found in federal countries (except the United States, Mexico and Australia). They are also used in Italy and in many Central and Eastern European countries. In Latvia, Slovenia and Poland, the sharing of the personal income tax is a major source of revenue, accounting for more than 50% of subnational tax revenues.

Shared taxes are increasingly being used in France. Examples are the apprenticeship tax (shared with the regions), the special tax on insurance contracts and a tax on network companies-IFER. From 2018, following the regional reform, regions will benefit from a share of the VAT. In Portugal, since 2007,

municipalities receive a share of the PIT, capped at 5% of tax receipts collected from local residents (municipalities can decide to reduce this percentage rate).

When subnational governments have the possibility to levy a surtax or a surcharge on a national tax, they enjoy a higher taxing power. “Piggy-backing” is also found in several OECD countries (Box 1.4).

#### Box 1.4. Piggy-backing on national taxes in some OECD countries

Piggy-backing provides some taxing power to subnational governments as they can decide on their own marginal rates and reliefs, within lower and upper limits. They can be thus assimilated to own-source taxes. In countries using piggy-back taxes, rates are generally low but these taxes provide a substantial amount of revenue because of the large size of the taxable base. Piggy-back taxes offer several other advantages: they are quite easy to administer as they use the already existing national taxes’ collection and management system. They have thus the value of simplicity and harmonisation with existing tax bases. They have however, some drawbacks as they may raise vertical fiscal externalities that are possibly harmful.

In Belgium, the municipal personal income tax is an additional tax on income. Rates are set by local authorities and apply to municipal residents of where the income is earned) and income tax collection is done by the federal government. In Italy, there is also a surtax on the PIT (*imposta addizionale comunale*), with some municipal leeway on the rate with a maximum of 0.8% (for Roma Capitale, 0.9%). In Portugal, municipalities levy a municipal surtax on the corporate profit tax (*derrama*) of up to 1.5% of taxable income. In Korea, local governments benefit from a local income surtax on households and companies. In Switzerland, local governments can levy a surtax (subject to lower and upper rate limits) on a large array of higher-level government taxes including the PIT and the CIT. In France, regional and departmental governments can levy a surtax on the internal consumption tax on energy products (“pollution tax”).

#### *The variety of own-source taxes at subnational level in the OECD*

In OECD countries, the most common local own-source taxes are taxes related to the provision of local public services. Examples include taxes on waste collection and street lighting.

Frequently, local governments also apply license taxes to specific local activities, such as advertising, gambling, entertainment, markets, real estate transactions. They also can raise business taxes (Box 1.5).

Local governments in some OECD countries also use general consumption or sales taxes. For example, in the United States, 37 states have implemented tax-sharing systems with local authorities within their jurisdictions, by allowing them to impose their own general sales taxes in addition to the state tax. Local rates range from 0.5% to 8.3%. In 2016, the share of local government sales tax accounted for 12.5% of local tax revenue (OECD/UCLG, 2019<sup>[7]</sup>).

#### Box 1.5. Local business taxes in the OECD

Several OECD countries utilize local business taxes. These take different forms, from business licences to more sophisticated taxes on salaries, capital structure, company or operation profit, added-value, economic activity, etc. In **Germany** for example, the local business tax (*Gewerbesteuer*) is the most important municipal tax, representing 44% of municipal tax revenue and 17% of total municipal revenue in 2016. Levied on all industrial and commercial companies, the rate of the local business tax is a

combination of a uniform tax rate of 3.5% (base rate) and a municipal tax rate set by municipalities (*Hebesatz* or multiplier). In **Austria**, the municipal business tax (*Kommunalsteuer*) also generates the bulk of municipal tax revenue (68% in 2016). The Austrian local business tax is a payroll tax of 3% on total salaries and wages paid each month by permanent establishments based in Austria. The payroll tax base and rate are both fixed uniformly across all local jurisdictions by the federal government. In **Luxembourg**, the most important tax by far is the municipal trade tax (*impôt commercial communal* – ICC). Established in 1936, the ICC represented 91.5% of municipal tax revenue in 2016, 26.1% of municipal revenue, and 1.4% of GDP. This tax is levied on the profits of commercial companies only. Each municipality determines a rate - approved by the central government - which is applied to the tax base. The central government collects the tax, but only a portion is returned to the local governments from where the revenue is raised. A horizontal equalisation mechanism redistributes around 65% of ICC receipts among municipalities according to a set of criteria. In **France**, the local business tax (*taxe professionnelle*) has been abolished in 2010. It has been replaced by a “territorial economic contribution”, paid by companies, and itself comprising a real estate tax (*contribution foncière des entreprises* or *CFE*) and a tax on business added value (*contribution sur la valeur ajoutée des entreprises* or *CVAE*). The CVAE is shared as follows: 26.5% for the communes and EPCIs, 23.5% for departments and 50% for the regions).

Local business taxes are however often criticised, for being too sensitive to business-cycle fluctuation (recession or boom), for having a potentially negative impact on employment and investment, and for often creating inequities both among local governments and among businesses.

Source: OECD elaboration based on OECD/UCLG (2019[7]), 2019 *Report of the World Observatory on Subnational Government Finance and Investment*, <http://www.sng-wofi.org>.

Finally, the use of taxes related to motor vehicles (motor vehicle tax, road tax, vehicle registration tax), paid by owners of vehicle, is also widespread in OECD countries, as they are also related to subnational governments responsibilities in terms of transportation (Box 1.6).

### Box 1.6. Local government motor vehicle taxes

Motor vehicle taxes have a strong link with local transportation infrastructure provided by subnational governments, in particular the construction and maintenance of roads. Therefore, if the tax is used to finance roads and other transportation, it can match payment for services to the benefit from the service. These taxes have other advantages: they have a potentially large tax base; they are relatively fair, especially if the tax is based on the value of the vehicle; they have a non-exportable base, and they are easy to pay and to collect. Finally, relative to other tax, revenue capacity is evenly distributed across local governments, while being consistent with environment goals of counteracting the negative externalities associated with local traffic congestion and air pollution. However, the freedom given to local governments on the setting of tariffs or rates taxes should be limited due to potentially harmful fiscal competition.

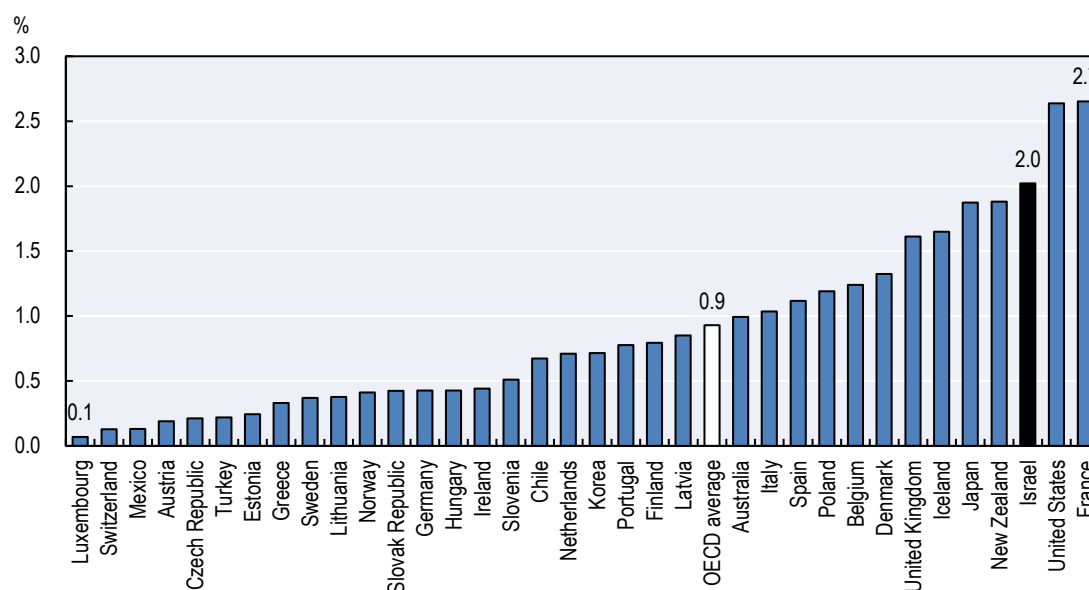
In Australia for example, vehicle-related taxation on registration and transfers accounted for 15% of states' tax revenue in 2016. In Italy, there is a regional tax on vehicles, which is paid by the owner or user of the vehicle and which represented around 9% of subnational tax revenue in 2016. In Chile, the motor vehicle tax accounted for 16.4% of municipal tax revenue and 6.8% of municipal revenue in 2016 while it amounted to 16% of States' tax revenue in Mexico.

Source: OECD elaboration based on OECD/UCLG (2019<sup>[7]</sup>), *2019 Report of the World Observatory on Subnational Government Finance and Investment*, <http://www.sng-wofi.org>.

### The property tax in the OECD

Figures 1.15 and 1.16 illustrate that revenue from the Israeli property tax contributes 81.1% of the total tax revenue raised by local governments (i.e. 2% of GDP), a share that is nearly double the OECD average of 41.4% in 2017.

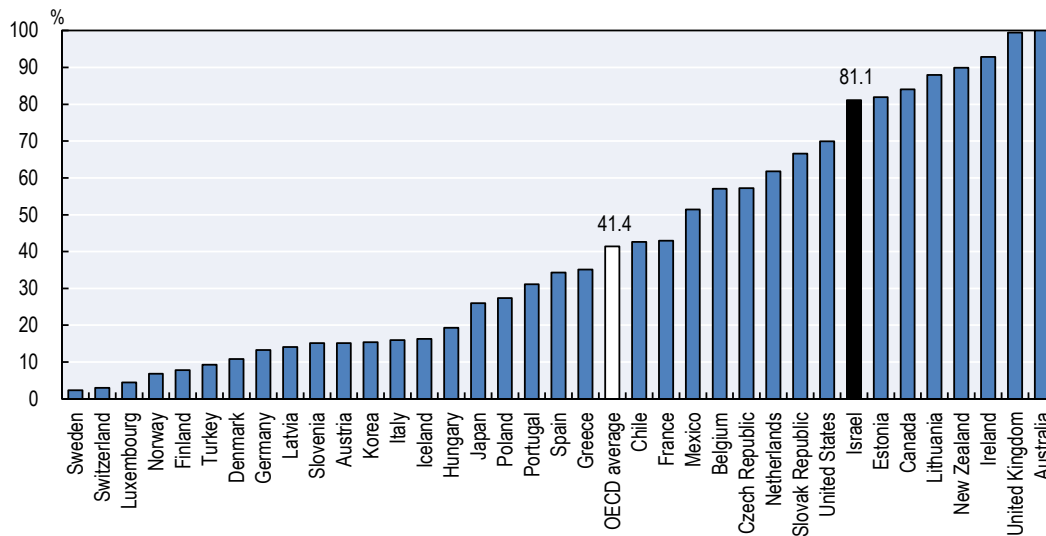
**Figure 1.15. Local government property taxes as a percentage of GDP – local governments, OECD countries, 2017**



Note: 2016 data for Australia, Greece and Mexico.

Source: OECD elaboration based on OECD (n.d.), *OECD Revenue Statistics*, <https://doi.org/10.1787/tax-data-en> (accessed on 15 May 2019).

**Figure 1.16. Local government property tax as a percentage of total local government tax revenue, OECD countries, 2017**

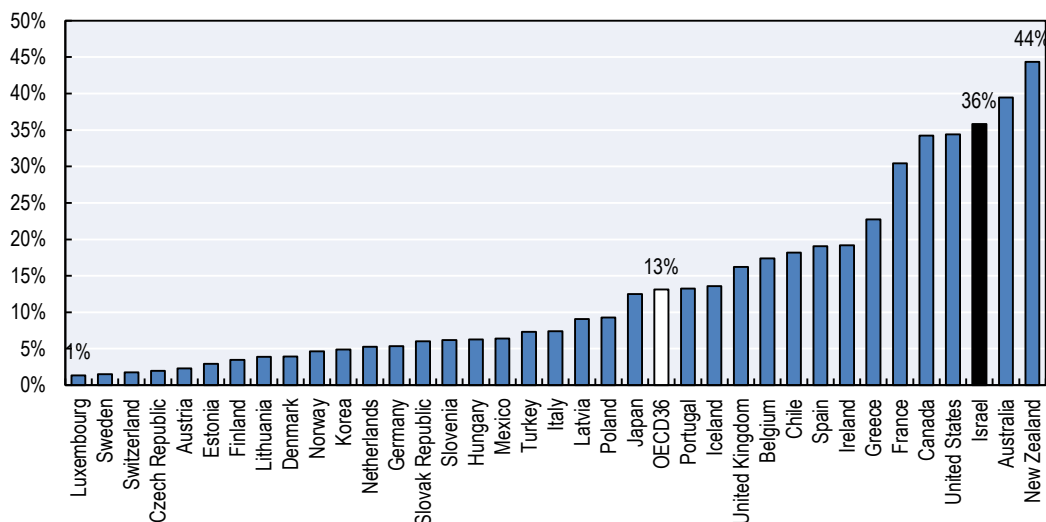


Note: 2016 data for Australia, Greece and Mexico.

Sources: OECD elaboration based on OECD (n.d.), *OECD Revenue Statistics*, <https://doi.org/10.1787/tax-data-en> (accessed on 15 May 2019); OECD (2018<sup>[13]</sup>), *Revenue Statistics*, <https://stats.oecd.org/> (accessed on 16 April 2019).

Combining the important role played by revenue from taxes in local government finance in Israel with the country's heavy reliance on property taxes as a source of local tax revenue, it is not surprising that the share of total local government revenue from property taxation in Israel is significantly higher than OECD average (36% vs 13%) as shown by Figure 1.17. Among OECD countries only New Zealand and Australia rely more heavily on the property tax for the financing of its local governments.

**Figure 1.17. Local government property tax revenue as a percentage of the local government revenue, OECD countries, 2016**



Sources: OECD elaboration based on OECD/UCLG (2019<sup>[7]</sup>), *2019 Report of the World Observatory on Subnational Government Finance and Investment*, <http://www.sng-wofi.org> and OECD (2018<sup>[13]</sup>), *Revenue Statistics*, <https://stats.oecd.org/> (accessed on 16 April 2019).

## The *Arnona* system: functioning and disparities

### ***How the Arnona functions***

The *Arnona* has several unique qualities that make it quite different from property taxes typically used by local governments throughout the world.

- *Israel uses an area-based property tax system.* In most countries, property taxes are based on the value of property. The assessed value of property for purposes of taxation can be determined in many ways. Assessed values in some countries, in particular in the United States and Canada, reflect quite accurately the market value of property. In other countries, especially when properties are reassessed infrequently, the link between the property tax base and current market values can be weak. In Israel, annual *Arnona* charges depend on the square meters of property. The tax is determined by multiplying area by an appropriate tax rate. Tax rates differ by type of property and in some cases by location within a local jurisdiction. Area-based property tax systems are quite rare. Within the OECD only the Czech Republic, Poland, and the Slovak Republic utilize area-based property tax systems.
- *In Israel the Arnona is levied on the user of each property.* Property taxes in most countries are levied on the owners of property. France and the United Kingdom are the only countries where a residence tax exists (*taxe d'habitation* in France and Council tax in the United Kingdom. In France, the residence tax is only one component of a “property tax system” (Box 1.7). In both countries, this tax is being reformed (see Box 2.1, Chapter 2). When the property is occupied by someone other than the property owner, the property owner remains liable for the tax, although depending on market conditions (demand and supply elasticities), some or all of the ultimate incidence of the tax may fall on the user (renter) of the property. In Israel, however, the user of the property, whether a resident or a business, is responsible for paying the *Arnona*.

*In Israel, local governments have very limited ability to change Arnona rates.* In most OECD countries, local governments have a substantial amount of *tax autonomy*. A local government with tax autonomy, or taxing power, has the ability to determine the amount of revenue it wants to raise. A local government with full tax autonomy would be able to set property tax rates and to determine the level and composition of any tax reliefs offered to its residents and businesses. In many countries, tax autonomy is at least somewhat limited by the imposition of restrictions on tax autonomy imposed by higher level governments. Since the mid-1990s, the OECD has been carrying out periodic studies of the tax autonomy of state and local governments in OECD countries. The OECD has developed a taxonomy, which allows officials in each country to determine the degree of taxing power granted to its sub-national governments (Blöchliger, 2015<sup>[14]</sup>). In its latest compilation, using 2014 revenue data, the OECD determined that local governments in Israel have less tax autonomy than all other OECD countries (OECD, 2019<sup>[15]</sup>).

### Box 1.7. The French property tax system

The system of property taxes in France is based on four main local taxes: a residence tax (*taxe d'habitation*), two property taxes on building and land (*taxes foncières sur les propriétés bâties et non bâties*) and a real estate tax on business (*contribution foncière des entreprises* or CFE). Together these property taxes contributed 59% of subnational government tax revenues and 30% of their total revenues in 2016, thus representing a major source of revenue for municipalities, inter-municipal cooperation bodies and departments. They amounted 3.4% of GDP one of the highest level in the OECD where the average is 1.1% of GDP. This system is however being reformed. In particular, the residence tax will be abolished, the abolition being phased in over three years for all tax payers (see Box 2.1, Chapter 2).

As in Israel, the residence tax is an example of a local tax, regardless of whether they are owners or renters, or whether they use the taxed property as a permanent residence or not. The tax is levied at the municipal, at the inter-municipal, and at the *département* levels. The tax is based on the rental value of residential properties ("*valeurs locatives cadastrales des propriétés bâties*"). The last overall estimation of rental values was conducted in 1970 using data collected on housing markets and on the physical characteristics of residential properties. Information on the physical characteristics of each property comes from cadasters and from information provided to local officials by property users. Since 1970, the rental values have not been re-estimated (except for a limited re-estimation at the *département* level in 1980). The existing rental values are simply indexed at a rate voted annually in the Law of Finances. The annual increases have been approximately proportional to changes in the consumer price index. The rental value of new housing units is estimated based on their physical characteristics and on local housing market data.

The tax rates are set independently by the different tiers of local government, subject to several constraints. The rates cannot increase or decrease by more than changes in local tax rates on businesses. Rates are also subject to limits related to average tax rates at the *département* and national levels. Low-income households are either exempt from the *taxe d'habitation* or their tax liability is limited to a specified percentage of their personal income.

Despite these provisions, the *taxe d'habitation* remains a regressive tax with respect to personal income. Perhaps for this reason, the government recently decided to exempt 80% of local taxpayers from the tax. Local governments will be fully compensated by the government for their loss of local tax revenue. The government has also established a special tax commission to study proposals for eliminating the *taxe d'habitation* for the 20% of the population still subject to the tax.

Owners of residential property in France are subject to a pair of additional taxes on property. The tax on improved and unimproved properties (*taxes foncières sur les propriétés bâties et non bâties*) is levied on the rental values of properties, discounted on average by 50% for build properties and by 20% for unimproved land. These taxes are levied by municipalities, by the *départements*, and, on an optional basis, by the inter-municipal bodies. Local governments are free to set their own tax rates subject to the same constraints that apply to the *taxe d'habitation*. However, the rate limitations with respect to personal income do not apply.

Businesses in France also face a local property tax, the Contribution Foncière des entreprises (CFE). The tax is based on the rental value (minus a rebate of 30%) of properties used for business purposes. Minimum tax liabilities are set by law and depend on the turnover of the taxed businesses. The legislation governing the tax also contains a long list of exemptions and rebates. The tax rates of the CFE are set by local governments. The rates are subject to the same conditions as those applying to the property tax on individuals. An additional constraint is that for each business, the sum of the local tax on business value added (the Contribution à la valeur ajoutée) and the Contribution foncière des



enterprises cannot exceed a specified percentage of each business' value added. In contrast to the taxes foncières sur les propriétés bâties et non bâties levied on individuals, the property taxes on business are based on actual rents as reported by the business or on an annual-determined assessed value, which is calculated on the basis of the physical characteristics of the properties used for business purpose, the type of business activity, and an index of market values.

Although the local government property tax originated under the British mandate, the modern *Arnona* was established in 1948. Originally, the tax rate was calculated as a proportion of each property's rental value. As most of the housing stock was at that time privately owned or rented, the *Arnona* could be easily estimated as a percentage of the rental value of the property (Daran, 1999<sup>[16]</sup>; Portnov, McCluskey and Deddis, 2001<sup>[17]</sup>). Between the mid-1950s and mid-1960s, the share of public housing in the total housing stock increased as the country provided housing for a flood of new immigrants. Consequently, the estimation base of *Arnona* was changed. During this period, the *Arnona* was estimated proportionally to the number of rooms for residential uses, and in proportion to the area of each parcel used for non-residential purposes.

Since 1970, the *Arnona* has been estimated as a function of the surface area of the property, measured in square meters. The tax is imposed on residential and non-residential properties as well as on undeveloped and agricultural lands. In general, the *Arnona* rate is determined by a combination of four criteria:

1. The actual use of the property, commercial, industrial, residential or agricultural. The basis of taxation is determined by actual use and not by the land use specified in official land use plans.
2. The location of the property within a local jurisdiction, usually determined by the establishment of several zones.
3. The type of property (single-family houses, large apartments, small apartments, etc).
4. The age of the property.

Through the mid-1980s, local councils had the authority to set their own *Arnona* rates. However, in response to a period of high inflation, in 1985 the Knesset enacted the Economic Stabilization Law (5745-1985), which froze all *Arnona* rates and required that any future increase in rates must be approved by the Ministers of Finance and Interior. In 1998, the Knesset passed the so-called "Arrangements Law". This legislation included a provision that pegged annual increases in *Arnona* rates to the rate of inflation as measured by the official consumer price index. Changes in rates, however, still required approval of the central government. Effective in 2007, the government issued regulations that specified annually-adjusted minimum and maximum allowable *Arnona* rates for major categories of properties. Local authorities retain the authority to change sub-classifications of types of property and to propose changes, both increases and decreases, in specific *Arnona* rates. All changes, however, must be approved by the Ministers of Finance and Interior (Box 1.8).

### Box 1.8. The *Arnona* property classification system

The central government established 13 primary classes for properties. Each local government, with the approval of the Ministries of Finance and Interior, can establish its own subclasses. Thus, throughout the country there are thousands of different subclasses that govern the *Arnona* rates levied on the users of different types of property located in different local jurisdictions. However, the most important distinction between classes of property is between residential use and business (non-residential) use.

Non-residential use is divided into more than 30 categories, including: offices and commerce, warehouses, industry, hi-tech, banks, insurance companies, cultural institutions, schools, museums, artist studios, public markets, cinemas, theatres, banquet halls, restaurants and coffee houses, department stores, swimming pools, country clubs, hotels, homes for the aged, embassies, parking lots, and petrol stations.

Within residential and non-residential classifications, location in a jurisdiction is the single most important factor. Each local government is divided into zones. Tel Aviv, for example, has been divided into five zones for residential uses and five zones for non-residential land uses. The zones are denoted as: best, better, average, poor, and poorest.

In Tel Aviv, there are four types of residential uses in the best residential district, three types in the second-best residential district, and only one type in the other three districts. In zone 1, the highest-ranked district in Tel Aviv, where 25% of the residential units and 33% of the residential area are located, the residential units are divided into four types: (a) individual houses measuring over 110 square meters; (b) apartments larger than 180 square meters; (c) average apartments, measuring between 110 to 180 square meters; and (d) all other dwelling units. In zone 2, which encompasses 34% of the residential units and 33% of the residential area, the first two categories noted above are combined into one, and the other two brackets remain the same. In zones 3, 4, and 5, which account for 41% of the residential units and 34% of the residential area, there is only one residential category. Because of the relatively low rates in these zones, there is no point in distinguishing among different residential types.

For non-residential uses, classification depends on use and size.

The final dimension of the classification system is the age of the property. There are seven age categories for residential property and only three for non-residential properties.

Once the current use, the location, the type of property, and the age of the property have been determined, the *Arnona* rate can be calculated.

Table 1.3 summarizes the requests by local governments for changes in their *Arnona* rates and indicates the proportion of the requests that were approved by the government in the years between 2013 and 2018. Although the number of requests each year were quite high, the available data do not indicate whether multiple requests were made by the same local government. In each year, more local governments requested increases in non-residential rates than decreases, and the amounts (in shekels) of the requested increases were much larger than the size of requested decreases. The picture for the residential *Arnona* was more mixed, with more decreases requested in 2013 and 2018. Over the five years of requests and the four types of requests (residential and non-residential, increases, and decreases) in only six cases did the Ministries of Finance and Interior approve more than 50% of the requested change in *Arnona* rates. In 2018, 72% of requested increases in residential *Arnona* rates were approved, but the amount of the requested increases was quite small (NIS 5.5 million). The generally low approval rates reinforce the limited amount of local government tax autonomy in Israel.

Table 1.3. Requests for unusual property tax approvals, 2013-18

		Increase		Decrease		Total
		Residential	Non-residential	Residential	Non-residential	
2013	Total authorities' requests	(15) 11 754 127	(62) 118 442 059	(11) 19 513 680	(45) 49 664 509	61 017 997.00 NIS
	Total ministers' approval	(8) 3 372 448	(45) 44 560 23	(1) 8 000 000	(9) 10 620 140	29 312 571.00 NIS
	Rate of requests approved (%)	29	38	41	21	
2014	Total authorities' request	(49) 66 365 149	(89) 207 065 156	(11) 15 081 074	(40) 62 465 186	195 884 045.00 NIS
	Total ministers' approval	(31) 36 502 798	(73) 47 204 202	(3) 8 257 000	(16) 23 111 921	52 338 078.00 NIS
	Rate of requests approved (%)	55	23	55	37	
2016	Total authorities' requests	(48) 40 599 896	(98) 278 868 443	(23) 22 119 293	(61) 101 021 056	196 327 990.00 NIS
	Total ministers' approval	(12) 17 690 502	(29) 28 60 957	(10) 19 682 841	(24) 53 434 109	20 720 619.00 NIS
	Rate of requests approved (%)	44	10	89	53	
2017	Total authorities' requests	(23) 28 907 366	(65) 143 791 322	(16) 19 680 995	(40) 45 605 105	124 629 239.00 NIS
	Total ministers' approval	(13) 10 432 724	(50) 21 341 774	(4) 3 434 061	(20) 27 449 690	9 585 626.00 NIS
	Rate of requests approved (%)	34	15	12	60	
2018	Total authorities' requests	(13) 5 523 436	(66) 73 814 881	(17) 19 078 311	(41) 33 506 462	26 753 544 NIS
	Total ministers' approval	(8) 4 031 325	(48) 14 918 861	(5) 6 993 071	(16) 10 271 406	1 685 709 NIS
	Rate of requests approved (%)	72	20	37	31	

Note: The numbers in parentheses refer to the number of authorities. In 2015 the municipal requests were not signed by the ministers.

Source: OECD calculations based on data from the Israeli Ministry of Finance.

Table 1.4 summarizes information on 2016 *Arnona* rates by type of property. With the exception of agricultural land used for farming, which is taxed at very low rates per square meter, residential property is taxed at lower rates than most non-residential property. The average rate of taxation differs markedly across types of non-residential property. For example, space used for general office functions was on average subject to a per meter tax of NIS 109, while the average rate for property housing a bank or insurance company was NIS 880. In some local governments, the rates for these types of properties greatly exceeded these averages. In general, rates for all types of property varied substantially across jurisdictions. One reason for this variation is the widespread use of multiple sub-classification of property and differential rates assigned to these sub-classifications. Local governments have considerable discretion in authorizing these sub-classifications and the associated rates.

The authorized set of rates used by each local government are multiplied by the taxable area, measured in square meters, of each type of property. The result of these calculations is referred to as the *Arnona* initial charge (or levy) for each type of property. Initial charges are then adjusted for outstanding liabilities (or credits), for interest due of previous debts, and for exemptions, releases, or discount for which the taxpayer is eligible.

**Table 1.4. *Arnona* Rates per square meter by property type, 2016**

Descriptive statistics, 251 local governments

Type of Property	Average	Standard deviation	Minimum	Maximum
Residential	29.2	19.6	0.2	102.3
Offices, services and trade	109.2	79.2	28.9	1 006.7
Industry and craftsmanship	70.7	37.6	15.8	265.4
Banks and insurance companies	880.4	334.2	340.0	1 660.0
Hotels	60.5	29.2	16.1	170.0
Parking lots	25.3	18.2	1.1	66.7
Occupied land	12.5	10.7	0.02	53.2
Agricultural land	8.4	24.8	0.01	245.0
Agricultural buildings	13.7	22.9	0.2	180.0

Note: Rates measured in new Israeli shekels (NIS). Local jurisdictions with no property of a given type are not included in calculation of descriptive statistics for that type of property.

Source: OECD calculations using Central Bureau of Statistics data (<https://www.cbs.gov.il/en>).

Local governments are authorised by the Ministry of the Interior to provide discounts, releases, or exemptions to certain residential taxpayers. In general, discounts are available for households that may have difficulty in paying their *Arnona* charges. Examples include those with low incomes, the elderly, disabled, and students. Each local authority decides whether it will provide full or partial discounts, and, within the parameters set by the Minister of the Interior, the conditions upon which discounts and exemptions will be granted. Box 1.9 provides more detail on these discounts.

### Box 1.9. *Arnona* discounts and exemptions

Clause 12(b) of the Arrangement Law grants the Ministry of Interior the sole authority to implement regulations that determine the maximum and minimum rate of *Arnona* discounts given by the local municipalities, and the terms under which they are given. Each year the Ministry of Interior publishes an *Arnona* Discount Table that specifies the conditions under which individuals are eligible for *Arnona* discounts. In general, senior citizens, people with certain mental and physical disabilities, soldiers performing compulsory national service, new immigrants, and students are eligible for discounts. Individuals with low incomes can also receive discounts on their *Arnona* payments that are inversely related to their monthly income. Local governments decide whether they will grant these means tested discounts, and the magnitude of the discounts.

At the discretion of local governments, discounts may also be given for certain uses of property such as property used by educational, religious, or charitable organisations. Approximately 200 local governments provide 50% to 70% *Arnona* exemptions for government-owned property. In Jerusalem, there are no exemptions for government-owned property, and starting in 2017, in 60 jurisdictions *Arnona* tax liabilities on government property are allocated to the *Arnona* Fund. As described below, the revenues from the fund finance Equalisation Fund grants allocated to some local governments.

In 2016 and 2017, total exemptions, releases, and discounts given by municipal governments were approximately NIS 3.1 billion and NIS 3.4 billion, respectively. According to the Israeli Association of Local Governments, the increase in discounts between 2017 and 2018 created an additional loss of *Arnona* revenue of NIS 100 million. In 2017, residential discounts equalled 24% of the total revenue from the residential *Arnona*.

*Arnona* bills are generally issued in early January. The *Arnona* can be paid in a single lump-sum payment, in two or three equal payments or bi-monthly. Many local governments contract with private firms to collect net *Arnona* charges. To help ensure the payment of the *Arnona*, properties cannot be sold until the seller has remitted all unpaid property tax bills. Despite these efforts, the collection rate—the amount collected relative to the sum of net charges—remained low in many jurisdictions. In 2017, the collection rate for the residential *Arnona* ranged from under 10% to nearly 100%. The average rate was about 70%.

In 2016, local governments in Israel raised NIS 23.8 billion from the *Arnona*, with 43.6% of that amount coming from the tax levied on residential property. Table 1.5 shows that balances owed, interest charges, and various adjustments increased initial residential charges. After deducting NIS 3.1 billion in exemptions, releases, and discounts, net residential charges equalled NIS 14.2 billion. Given an overall collection rate of 73.2%, 2016 revenue from the residential *Arnona* equalled NIS 10.4 billion.

**Table 1.5. *Arnona* charges and collections, 2016**

	(in NIS)
<b>Residential <i>Arnona</i></b>	
Initial charges	12 600 806 000
+ Balances owed, interest payments, and miscellaneous adjustments	17 272 075 189
- Exemptions, releases, and discounts	3 116 038 000
= Net charges	14 156 037 189
x Residential collection rate (%)	73.2
= Residential collections	10 365 829 000
<b>Non-residential <i>Arnona</i></b>	
Initial charges	14 801 049 000
Non-residential collections	13 391 046 000
<b>Total <i>Arnona</i> revenue</b>	<b>23 756 875 000</b>

Source: OECD calculations using CBS data (<https://www.cbs.gov.il/en>).

### ***Differences in Arnona revenue among local governments***

In Israel, as in almost all countries, there are large differences in the ability of local governments to raise revenue from their own sources. Economic activity and hence tax capacity tend to be concentrated in and around large metropolitan areas. Unless endowed with substantial natural resources, rural and remote areas have much lower tax capacity. One rough indicator of the differences across municipalities in economic activity is the average monthly wages of employees residing in each municipality. The data in Table 1.6 show that the average monthly wage in 2015 was below NIS 6 000 in 56 local governments and above NIS 14 000 in 11 jurisdictions. Average monthly wages were below NIS 4 500 in the poorest local government above 17 000 in the richest.

**Table 1.6. Number of local governments by the average monthly wages of residents, 2015**

Average monthly wages	Number of local governments
Less than 6 000	56
6 000-7 499	63
7 500-8 999	44
9000-11 999	54
12 000-13 999	27
14 000 and more	11
<b>Total</b>	<b>255</b>

Source: OECD calculations using Central Bureau of Statistics data (<https://www.cbs.gov.il/en>).

To provide a more comprehensive assessment of both the resources and the economic and social needs of each local government, the Central Bureau of Statistics (CBS) developed a Socio-economic index. The index combines data on the demographic composition, education, quality of life, employment and retirement status of the population of each local government. The latest version of the index uses data for 2015. Although the index is constructed as a continuous variable, the CBS used cluster analysis to divide local governments into 10 “clusters” with cluster 1 containing the local governments in the weakest socio-economic condition and cluster 10 containing those in the strongest condition. The clusters are constructed so as to minimize the variation of the index values within each cluster. The largest number of governments are found in cluster 2 (42) and cluster 8 (40). Box 1.10 provides additional detail on the construction of the socio-economic index.

### Box 1.10. Constructing a socio-economic index for local governments

In order to characterize the socio-economic condition of the population of local governments, the Central Statistical Bureau (CBS) has constructed a *socio-economic index*. The latest index is based on demographic, economic, and social characteristics of the populations of local governments in 2015. The index is calculated as a continuous variable and its value is used in the allocation of government’s General Balance Grant to local governments. The index is constructed from the following 14 variables using factor analysis techniques:

1. Median age.
2. Dependence ratio – the ratio between the number of old (>64) and young (<20) person and the working-age population (20 to 64).
3. Percentage of families with 4 children or more.
4. Average years of school for people age 25-54.
5. Percentage of people with academic degrees, age 25-54.
6. Percentage of people with work revenue age 15 and older.
7. Percentage of women age 25-54 with no work income.
8. Percentage of people with income over twice the average salary.
9. Percentage of people with work income below minimum wage.
10. Percentage of people receiving a fixed income and supplementary income for old age and survivors.

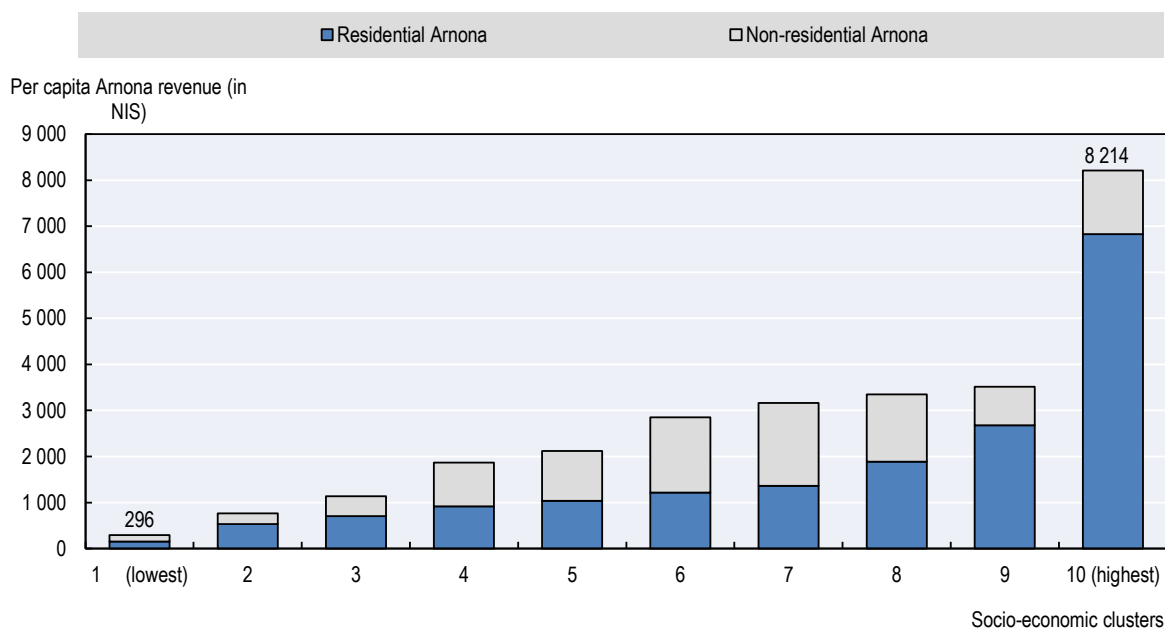
11. Average per capita monthly earnings.
12. Motorization level – total number of privately-owned cars and trucks up to 3.5 tons divided by the number of residents in the geographical unit in 2015.
13. Average auto licensing fees (vehicle value assessment) – total fee paid for privately-owned cars and trucks of residents of the geographical unit in 2015.
14. Average number of days spend abroad – total number of days spend abroad of people age two and older in 2015, divided by the number of people age two and older in the geographic unit.

Once each local government's socio-economic index value has been calculated, the local governments are allocated to one of ten clusters, with cluster 1 being the weakest and cluster 10 being the strongest. The clusters are determined by employing cluster analysis methods, which minimize the variance of the indices within each cluster and maximize the variance between clusters. The cluster assignments are used by the government in the implementation of a number of policies related to local governments.

Figure 1.18 displays average per capita revenue from both the residential and non-residential *Arnona* for each of the 10 socio-economic clusters. The total height of each bar indicates the average total per capita revenue from the *Arnona* in each cluster. The differences across clusters are striking. The bottom portion of each bar represents the residential *Arnona*. As the socio-economic status of a local government increases, so does its per capita revenue from the residential *Arnona*. The average residential *Arnona* revenue in the first two clusters are NIS 155 and 531, respectively. The per capita residential *Arnona* revenue in the ninth and tenth cluster is NIS 3 513 and 8 214. Average per capita revenue in the ninth cluster is 6.6 times higher than the average in the second cluster. These differences are only exacerbated by the distribution of non-residential *Arnona* among local governments. Average per capita revenue rises from NIS 141 in the first cluster to NIS 1 384 in the tenth.

The data presented in Table 1.7 help explain why per capita revenue from the residential property tax is very low in the first few socio-economic clusters and rises steadily as one moves to higher clusters. The third column demonstrates that on a per capita basis, residential area, measured in thousands of square meters, is lowest in cluster one and larger with each subsequent cluster. The data show that residential area per capita is about twice as large in the ninth cluster as compared to the second cluster. The next column illustrates the pattern of average residential rates. The average residential rate is below average in cluster 1 and way above average in cluster 10. However, looking at residential rates in clusters 2 through 8 (the clusters that include most local governments), the variation in average rates is muted, although the rates in clusters 2 through 5 are somewhat higher than average rates in clusters 6 through 8. The data in the fifth column clearly demonstrates that the sum of exemptions, releases, and discounts as a share of initial residential charges is largest in cluster 1 and declines as the cluster numbers increase. In cluster 2 total exemptions, releases, and discounts are 41.5% of residential charges, while in cluster 9 they account for only 9.7% of charges.

**Figure 1.18. Per capita residential and non-residential *Arnona* revenue by socio-economic cluster, 2017**



Note: Havel Eilat and Tamar are not included in these calculations.

Source: OECD calculations using data from the Central Bureau of Statistics (<https://www.cbs.gov.il/en>).

Although the per capita net charges after exemptions, releases, and discounts is not shown in Table 1.7, they are lowest in cluster 1 and highest in cluster 10. Net charges per capita, however, are quite similar in clusters 2 through 7. As shown by the data in the next to last column of Table 1.7, collection rates are under 50% in clusters 1 and 2, and over 90% in clusters 9 and 10. The result of applying these collection rates to net charges is that per capita collections from the residential *Arnona* are lowest in low-number clusters and rise as the cluster numbers increase. In summary, the data in Table 1.7 demonstrates that there are multiple reasons for the low levels of per capita residential *Arnona* in local governments with low-values in the socio-economic index. Although differential collection rates are important, the observed pattern of revenue from the residential *Arnona* is also due to differences in housing consumption, in residential rates, and discounts among local governments with different socio-economic characteristics.

**Table 1.7. Per capita residential *Arnona* by socio-economic cluster, 2016**

Socio-economic cluster	Number of governments	Residential area per capita (in thousands of sq. meters)	Residential rates per capita (per thousand sq. meters)	Discounts as % of initial charges	Collection rate (%)	Arnona collections per capita (NIS)
1	8	14	1.5	65.8	44.1	178
2	40	27	3.0	41.5	47.4	519
3	36	30	3.1	35.6	54.2	708
4	19	34	2.6	29.7	60.0	954
5	31	36	3.1	25.2	71.8	1 095
6	29	37	1.9	18.3	78.9	1 191
7	36	37	1.8	17.6	84.4	1 312
8	40	44	1.9	13.0	88.1	1 754
9	8	53	6.7	9.7	92.9	2 595



Socio-economic cluster	Number of governments	Residential area per capita (in thousands of sq. meters)	Residential rates per capita (per thousand sq. meters)	Discounts as % of initial charges	Collection rate (%)	Arnona collections per capita (NIS)
10 (highest)	2	136	12.6	4.9	93.7	6 344
<b>Total/average</b>	<b>249</b>	<b>36</b>	<b>2.7</b>	<b>26.4</b>	<b>69.7</b>	<b>1 145</b>

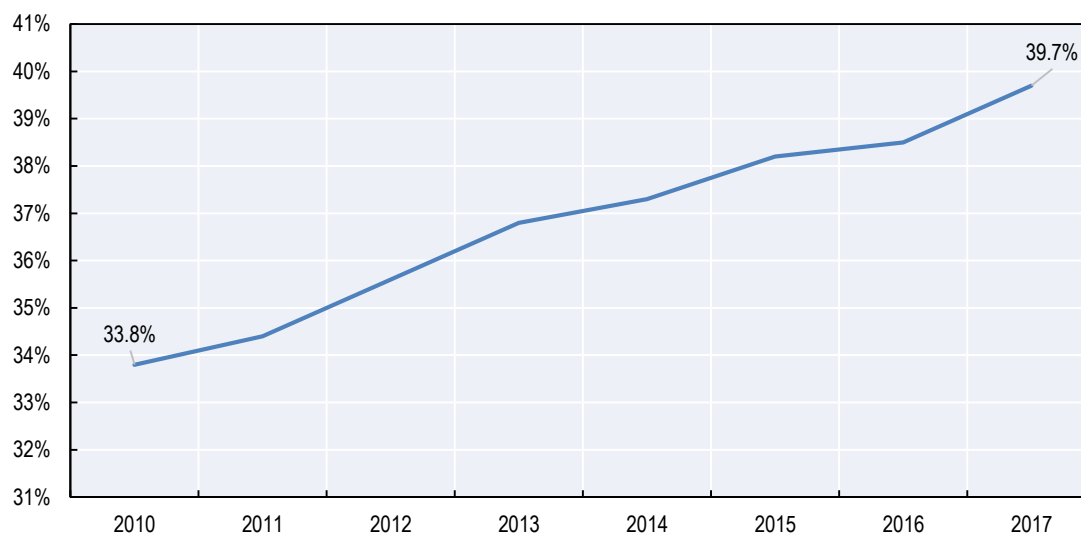
Note: Six local governments are excluded from this table because of missing data.

Source: OECD calculations using Central Bureau of Statistics local government data (<https://www.cbs.gov.il/en>).

## Central government grants to local governments

The central government plays an important role in the financing of local governments in Israel. As shown in Figure 1.19, in 2010, 33.8% of the regular budget of local governments came from central government grants. This percentage has been steadily rising. In 2017, grants from the central government contributed 39.7% of regular budget revenue.

**Figure 1.19. Government grants as a percentage of local governments' regular budgets**

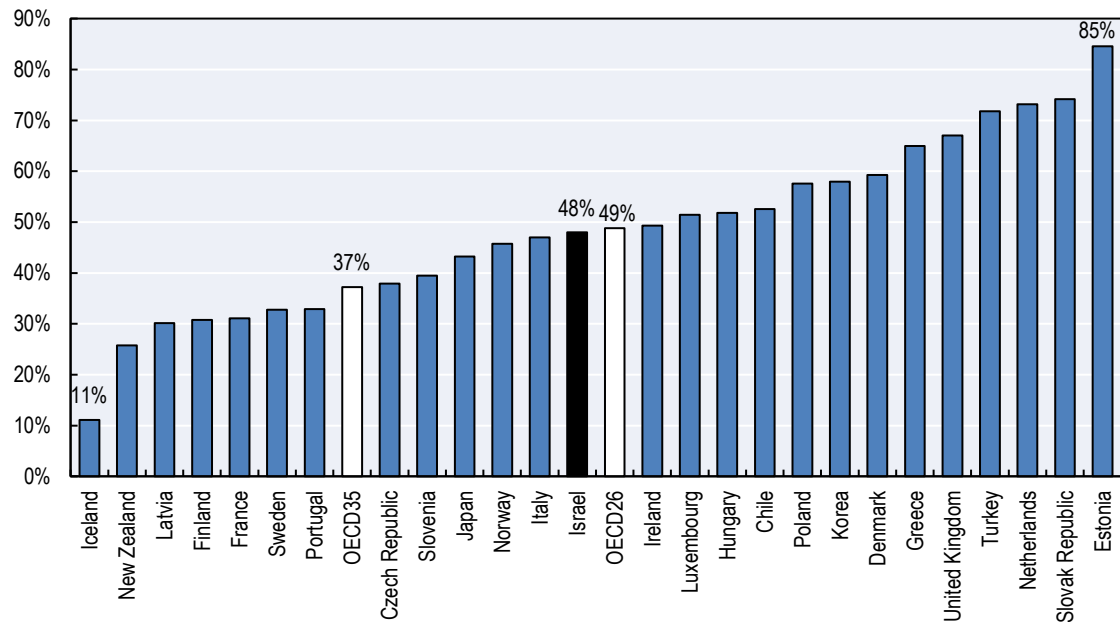


Source: OECD calculations using Central Bureau of Statistics local government data (<https://www.cbs.gov.il/en>).

Figure 1.20 compares Israel to other unitary countries within the OECD. Available data indicate that Israel's central government fiscal support for local governments is about equal to the average among OECD countries. The figure shows that in Israel in 2016 central government grants to local governments comprised 48% of the total revenue of local governments. This amount includes the revenue in both the regular and irregular budgets of local governments. On average, grants to subnational governments in OECD unitary countries equaled 48.8% of the total revenue of subnational governments in these countries.

As was shown in Figure 1.9, in 2017 slightly more than three-quarters of the total revenue from grants came from grants from the Ministries of Education and Welfare in support of local government spending on education and social welfare respectively. The next most important source of grant revenue is the General Balancing Grant, which contributed 15.2% of the total local government revenue from grants. Finally, a set of other central government grant programs contributed 8.1% of revenue from grants.

Figure 1.20. Grants as a percentage of total revenue of subnational governments OECD unitary countries, 2016



Sources: OECD elaboration based on OECD (2018<sup>[3]</sup>), *Subnational Governments in OECD Countries: Key Data*, <http://www.oecd.org/regional/Subnational-governments-in-OECD-Countries-Key-Data-2018.pdf> (accessed on 16 May 2019).

### Grants for education and social welfare

Both education and welfare are local government responsibilities that have been delegated from the central government. As delegated functions, they are largely funded by the central government. Most of the ministerial grants for education and welfare come in the form of what public finance economists refer to as *block grants*. The revenue from the education grant must be spent on teacher salaries and on other necessary expenses involved with operating local schools. Within these broad categories, local governments have some discretion on exactly how they spend the money from the block grant portion of the education grant. In addition, both the education and welfare grants have a *matching grant* component. To receive money through a matching grant, local governments are required to “match” the additional grant with some additional resources from local government sources. In the case of education, grant revenue for use in paying school secretaries and janitors is subject to a 13% matching rate. This means that for a local government to increase spending on janitorial pay by 1 000 shekels, it must use 130 shekels of its own fiscal resources (in most cases, primarily from the *Arnona*) in order to receive a matching grant of 870 shekels. The matching grant component of the welfare grant is larger than for the education grant. Salaries of social workers are financed using a 25% matching rate.

### General balancing grant

The balancing grant was designed to be explicitly equalising by providing larger per capita grants to local governments that have insufficient fiscal resources to meet their public service responsibilities. The allocation of the balancing grant to local governments is determined annually by the Ministry of Interior. The Minister calculates individual local government allocation using a complex formula, often called the Gadish formula, named after the chair of a committee that developed the formula. While most of the balancing grant is distributed as a block grant in support of local governments’ regular budgets, a portion of the grant (no more than 15%) is conditional on meeting certain criteria (to be described below).

Each local government's balancing grant depend on the calculation of a *Model Grant* and the actual grant received in the previous year. The *Model Grant* is calculated as the gap between each local government's *normative expense* and its *potential revenue*. Box 1.11 provides details involved in calculating per capita normative expenses for the 2019 balancing grant, and Box 1.12 describes the calculation of potential revenue.

### Box 1.11. Calculation of “normative expenses” per-capita

The starting point for estimating normative expenses is actual regular budget expenditures in 2002, with certain exclusions. The **general formula** for the calculation of normative expenses per capita is composed of a lump-sum part (A) and a part (B \* P) that is proportional to the number of residents. The formula is:

$$Y = \frac{A + B_{1,2,3} * P}{P}$$

where,

Y = Normative per-capita expense.

P = local government's population as of October 31 2018.

A/P = lump-sum per capita expense

B<sub>1,2,3</sub> = proportional per capita expense.

The coefficients, which were determined through the use of an expenditure regression model, differ for different types of local governments. For local councils and municipalities the 2019 coefficients were:

A = 5,024,000 NIS

B<sub>1</sub> = 4,130 NIS per capita up to the first 20,000 residents.

B<sub>2</sub> = 3,655 NIS per capita for the next 50,000 residents.

B<sub>3</sub> = 2,972 NIS per capita for all residents over the 70,000 residents.

In addition, an extra 3% is added for local councils and municipalities located in the “Jewish sector” in order to account for extra expenses for religious activities and special security expenses.

Normative expenses are further adjusted by the application of a series of “preference coefficients,” which reflect specific circumstances and characteristics of local authorities. The expense coefficients are additive, but total preferences cannot increase normative expenses by more than 10%. Preference coefficients are related to the following municipal characteristics:

- *the socio-economic index cluster* – larger preference coefficients are awarded for local governments in lower clusters. For example, a local authority in cluster 1 is given a + 10% coefficient, while a local authority in cluster 10 is given a preference coefficient of - 15%.
- *the socio-economic index differential* (only for local authorities with more than 8 000 residents) - larger index value differentials are awarded larger preference coefficients.
- *education expenses* – the greater the share of municipal population under age 19, the higher the expense preference coefficient.
- *welfare expenses* – the greater the share of municipal population age 65 and over, the higher the expense preference coefficient.

- Conflict lines and Jude and Samaria – for local authorities on conflict lines or in Judea and Samaria, a 4% preference coefficient is awarded.
- *Immigration expenses* – preference coefficient set equal to the percentage of municipal population that are recent immigrants (from selected countries), but not to exceed 10%.

Regional councils benefit from two additional expense coefficients. One provides a larger coefficient for regional councils with a larger number of settlements, and the other awards larger coefficients when the distance between settlements is larger.

Once the normative per capita expenses have been calculated (based on the regression model and application of the preference coefficients), they are subject to ceilings determined by the government. The allowable maximums are substantially higher for regional councils than for other local authorities, and the maximums are also several percent higher for local governments in socio-economic clusters 1 through 4 as compared to local governments in clusters 5 through 10. For example, for the 2019 balance grant allocations, the maximum per capita normative expense for local authorities in clusters 1 to 4 is NIS 5 961 and NIS 5 812 for local authorities in clusters 5 through 10.

### Box 1.12. Calculation of potential revenue per capita

Per capita revenue of local authorities consists of revenues from property taxes, other revenue from own-sources, and grant revenue from the central government. The calculation of potential revenue from the property tax is based on normative *Arnona* tax rates and *Arnona* collection rates that vary by socio-economic cluster. Based on actual tax bases of each local authority, one can calculate the potential tax revenue that a local authority would collect if it used the normative tax rate associated with its socio-economic cluster and successfully collected taxes at the normative collection rate associated with its socio-economic cluster. Table 1.8 below lists the normative collection rates for residential and non-residential property taxes and the normative residential tax rate. Regardless of the results of the calculated potential property tax revenue, minimum per capita potential property tax revenue was set at 1 040 NIS.

Potential per capita revenue from own-sources other than the *Arnona* is calculated as a normative lump-sum amount and an amount that varies with population size and type of government. These calculations are further adjusted according to the socio-economic cluster to which local government belongs. Potential revenue is reduced for local governments in clusters 1 through 4, and increased for local governments in clusters 5 through 10. An additional adjustment is made for local authorities that are absorbing a large number of new immigrants. Potential revenue is reduced because of immigration, but not by more than 5%.

**Table 1.8. Normative property tax rates and collection rates, 2019**

Socio-economic cluster	Collection non-residential (%)	Collection residential (%)	Normative residential property tax rate
1	75.0	60.0	44.32
2	75.0	65.0	44.32
3	75.0	65.0	45.21
4	75.0	70.0	46.11

5	75.0	75.0	48.42
6	77.5	77.5	50.84
7	85.0	85.0	53.38
8	85.0	85.0	58.72
9	90.0	90.0	67.52
10	90.0	90.0	77.65

Finally, if the result of the above set of potential revenue calculations fall below the minimum per capita revenues listed in Table 1.9 are imposed.

**Table 1.9. Per capita revenue minimums**

Socio-economic cluster	Local councils and municipalities	Regional councils
1	3 473	6 338
2	3 515	6 338
3	3 580	3 659
4	3 645	6 659
5-10	3 710	6 694

Prior to the calculation of the final Balance Grant allocation, special account is taken of two additional categories of normative expenditures. Pension expenses up to a rate of 13.33% of the calculated expense for general salaries are recognised in full. In addition, loans repayments (out of loans for water and sewage) are added to normative expenses. These supplementary expenses are subject to a ceiling of 30%.

The actual allocation of Balancing Grants to local governments is rather complex. First, a “normative Balancing Grant” is calculated as the difference between normative expenses and normative revenues as defined in Box 1.11 and Box 1.12. Normative Balancing Grants are then adjusted by a “realization rate”, which is a weighted average of the socio-economic index and the peripherality index, with weights of 70% and 30% respectively. The result of this calculation is the “potential balancing grant.” This potential grant is then compared to the actual grant allocated in the previous year. Annual percentage reductions in grant allocations are determined by the Ministry of Interior, with the allowable reductions being smallest for local authorities in the bottom three socio-economic clusters.

Finally, the allocations of balancing grants to local authorities are subject to a tax collection condition. The Ministry of the Interior “considers meeting yearly collection goals an important source of income and a necessary condition for the proper economic management of the local authorities”. Thus, a portion of the balancing grant is provided as a conditional grant, which will be transferred to the local authority subject to it meeting the required collection goals for the year for which the balancing grant is allocated. The collection rate that local authorities are required to meet was increased at a rate of 1% per year between 2016 and 2018 from 80% to 83%. To receive the conditional grant, local authorities must increase their collection rates relative to their collection rate in the previous year.

Table 1.10 illustrates the results of the balancing grant allocation process described above. Two-hundred two local governments received balancing grants in 2017. The data in Table 1.8 show clearly that the balancing grant is in general equalising. Average per capita balancing grants are largest in the local governments in the lowest socio-economic clusters. All but five local governments in the bottom five

clusters receive balancing grants. The average per capita grant in the top five clusters is substantially smaller and 47 jurisdictions in those clusters receive no balancing grant allocation.

Table 1.10 also shows that within clusters there is a wide variation in the per capita grants received. The maximum per capita grants in clusters two through eight are larger than the maximum grants in clusters one and two. An indication of the magnitude of the within-cluster differences in per capita grants is given by the fact that in clusters six through nine, the standard deviation of per capita grants is larger than the average grant.

**Table 1.10. General Balancing Grant per capita by socio-economic cluster, 2017**

Socio-economic cluster	Number of governments	Average	Standard deviation	Minimum	Maximum	Number with zero grant
1 (lowest)	11	1 112	471	513	2 023	0
2	42	1 336	546	444	2 023	0
3	36	1 316	575	0	2 440	1
4	19	1 178	526	380	2 142	0
5	30	1 045	771	0	3 018	4
6	29	936	851	0	3 212	4
7	37	532	668	0	2 212	14
8	40	227	529	0	2 998	23
9	8	52	87	0	243	4
10 (highest)	2	0	0	0	0	2
<b>Total/average</b>	<b>254</b>	<b>889</b>	<b>752</b>	<b>0</b>	<b>3 212</b>	<b>52</b>

Note: Hevel Eilat not included in calculations because of missing data.

Source: OECD calculations using data from the Central Bureau of Statistics (<https://www.cbs.gov.il/en>).

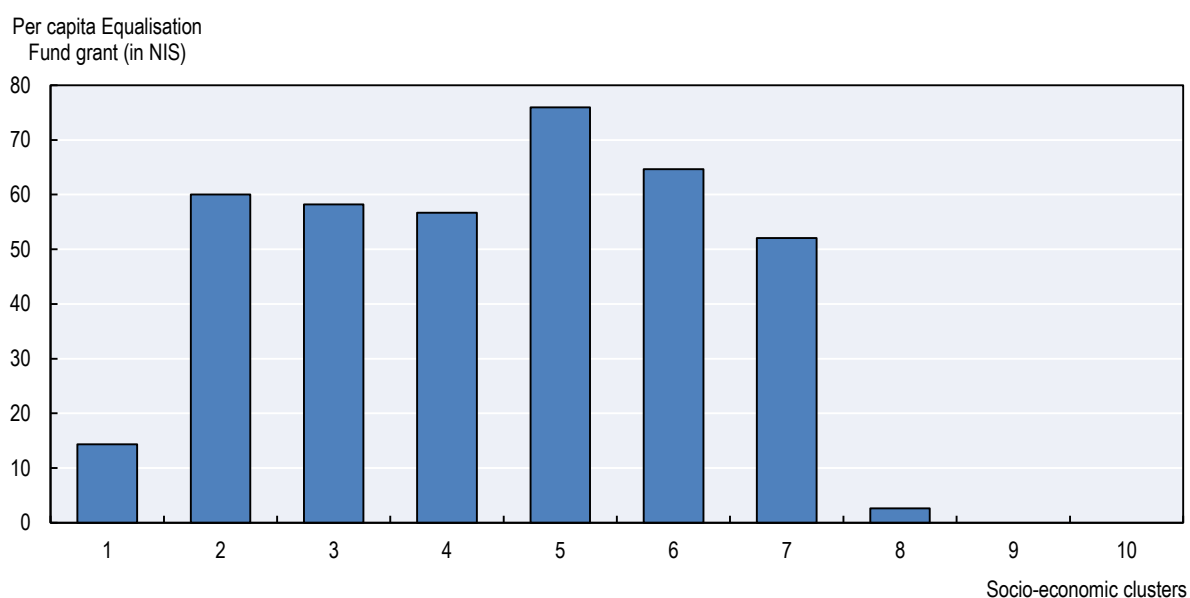
### ***Equalisation Fund grant***

In 2017, the government created an equalisation fund, called the *Arnona* Fund. The fund was financed from the money that the central government would have paid local governments if the *Arnona* was levied and paid on government-owned property located in 60 local jurisdictions. The revenues in the *Arnona* Fund are allocated to local governments in an equalising manner. Each year, the total amount to be distributed is fixed by the Law of Finances. In 2017, allocations from the Equalisation Fund totaled NIS 138,000,000.

The formula for allocated Equalisation Fund grants to local authorities is based on the following variables, with the percentage weight on each listed in parentheses: the socio-economic index (13,5%); the lack non-residential property (27%); the peripherality index (10%); the financial management index (28%); and other criteria (21.5%). In 2017, 75 local authorities receive no allocation from the equalisation fund. The average allocation among local governments receiving grants was NIS 1 350 900, or NIS 73.3 per capita.

Figure 1.21 illustrates the allocation of Equalisation Fund grants among local governments classified by their socio-economic cluster. On average, local governments in cluster one receive small grants, only NIS 14 per capita. The average per capita grants in clusters two through seven are very similar. Almost all local governments in the first six clusters receive Equalisation Fund grants. In the seventh cluster, 20 out of 37 local governments receive Equalisation Fund grants, while only one government in clusters eight through 10 receives a grant.

Figure 1.21. Average per capita Equalisation Fund Grant by socio-economic cluster, 2017

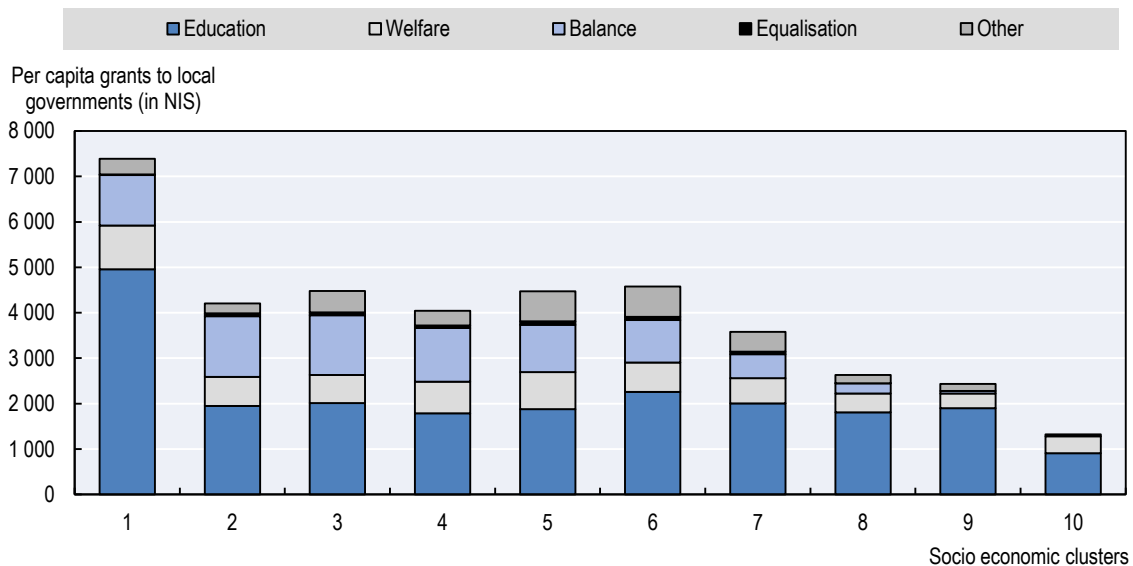


Source: OECD calculations using Central Bureau of Statistics local government data (<https://www.cbs.gov.il/en>).

### ***Distribution of grants by socio-economic cluster***

Figure 1.22 illustrates the allocation of all per capita central government grants across socio-economic clusters. Because the average per capita education grant in cluster one is more than twice as high as the average education grant in any other cluster, the total average per capita grant in cluster one is 64% higher than the second highest average grant (in cluster 6). Local governments in clusters two through six receive similar levels of per capita grants, although the average per capita grant in cluster six exceeds the average grant in cluster 2 by NIS 373. Above cluster 6, average per capita grants decline in each subsequent cluster. Because of their relative small size, the distribution of Equalisation Fund grants has almost no impact on the allocation of total grants across local governments.

Figure 1.22. Per capita grants to local governments by type of grant, 2017



Source: OECD calculations using Central Bureau of Statistics local government data (<https://www.cbs.gov.il/en>).

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## Notes

<sup>1</sup> Local governments were characterised as Jewish or Arab, if 70% or more of their residents were Jewish or Arab respectively.

<sup>2</sup> The word “cluster” is also used in Israel to group local governments with similar socio-economic characteristics (see Box 1.5). The cluster numbers assigned to local governments play an important role in the distribution of general balance grants and other government programs providing benefits to local governments.

<sup>3</sup> Prior to 2019, local councils also received donations from Toto (sports gambling).

<sup>4</sup> This distinction is important. In the framework of the revision of the System of National Accounts (SNA 2008), effective since 2014, the classification of some shared tax revenues has changed. In several countries, certain tax receipts (PIT, CIT, etc.) have been reclassified as transfers and no longer as shared taxes. Several countries have seen the share of subnational tax revenue in total subnational revenue fall sharply: from 54% to 10% in Austria; 44% to 4% in Estonia or from 46% to 7% in Slovak Republic.



# 2 Diagnosis of the major problems with the *Arnona* and the financing of local governments in Israel

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Chapter 2 provides a diagnosis of the most important problems with the way that Israel finances its local governments. The major focus is on the *Arnona*, the Israeli property tax, which is the major source of revenue raised directly by local governments. The analysis draws on data and information presented in Chapter 1 and on best practices found in other OECD countries. Although, as an area-based system, the *Arnona* is quite different from property tax systems found in most other countries, it is similar to all property taxes in that it is a recurring tax on immovable property. The chapter begins with a discussion of the advantages and the disadvantages of the property tax as a local government source of revenue. It then evaluates the *Arnona* relying on a standard set of criteria used by economists. Special attention is paid to land-use incentives created by the tax and to the distribution of tax burdens across households. The chapter then considers the adequacy of local government services, with a focus on public education and social services. It concludes with an assessment of the role of grants in reducing fiscal disparities among local governments.

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## The property tax as a local government source of revenue

There is a wide agreement among public finance experts that a recurrent tax on immovable property is a highly appropriate source of tax revenue for local governments. Although the property tax should not serve as the only source of local government revenue, it works well as the core for a revenue system that includes a mix of taxes, non-tax revenues, such as user fees, and fiscal transfers from higher levels of government.

Economists point to a number of reasons why property taxes are particularly well suited as a revenue source for local governments. These include:

1. By its very definition, immovable property cannot flee the tax collector; and the tax base is easily allocated between different subnational units without requiring adjustments for cross-border transactions or flows.
2. Because the supply of land is fixed, a property tax levied on land will not distort taxpayer behaviour, and thus is considered by economists to be highly efficient. At modest rates, a property tax on improvements, i.e. buildings, is not very distortive, and hence is considered quite efficient, especially when compared to other possible local government taxes.
3. Most local government public services provide services directly linked to properties, such as water supply and sewers, or to property owners and occupants.
4. A value-based property tax system captures for local governments some of the increases in the value of land and buildings that are attributable to local government expenditures. This capitalization of public services leads many economists to classify the property tax as a benefits tax, effectively serving as the price residents pay for the local public services they receive.
5. As long as local governments have some control over property tax rates, the property tax promotes local fiscal autonomy.
6. Compared to most other taxes, the property tax is a highly visible tax. It is generally paid in large lump-sum payments several times per year. This contrasts with local consumption taxes, which are included in the purchase price of goods and services, or earnings taxes, which are generally withheld by employers from regular pay checks. Because the property tax is visible, local taxpayers are more likely to hold local government officials accountable for the efficient and effective operation of local government.
7. In most decentralized countries, the property tax base of most local governments is large enough to generate, with moderate rates, sufficient revenue to cover a significant portion of their fiscal needs.
8. Property tax bases are generally more stable over the course of a business cycle than the bases of income and consumption taxes. This is particularly true for the base of an area-based property tax system.
9. Because it is generally much easier to make annual changes in property tax rates than to make changes in income or consumption tax rates, property tax revenues can provide a stable revenue source for local governments during economic downturns.

There are additional advantages to the property tax that are not specific to local governments. These include:

1. Economists do not agree on the incidence of the property tax. The recurrent property tax could be considered a tax on capital, an income tax, or a consumption tax depending on whether one considers it a tax on an asset, a tax on the flow of services that derive from owning or renting a property, or a tax on the imputed rent from owner-occupied housing.

2. Compared to other taxes, property taxes are considered the least harmful to economic growth. This is particularly true for property taxes levied on the value of unimproved land.
3. Property taxes can underpin sustainable land use. A tax on the value of land can help contain urban sprawl by providing developers with an incentive to convert developed land rather than develop vacant land on the urban periphery. The land-use effects of property taxes, which tax both land and buildings, are more ambiguous. Specifically designed “green” property taxes, such as oil-sealing taxes, and development charges, can further help internalize land-use externalities.
4. Information on land, buildings, and market prices collected in the course of administering taxes on immovable property becomes part of a valuable collection of information that has numerous governmental and private uses.
5. If up-to-date and publicly available, this information can facilitate orderly functioning of real property markets.

Despite their advantages—or perhaps because of some of them—recurrent property taxes are often underutilized as a source of local government tax revenue across OECD countries. In 2016, local government recurrent immovable property tax revenue as a percentage of GDP varied between 0.1% (in Luxembourg, Switzerland, and Mexico) and 2.9% (in Canada), with an average of 0.9% (OECD, 2018<sup>[11]</sup>). Israel’s *Arnona* revenue, at 2.0% of GDP was over twice as high as the OECD average.

Although property values have risen sharply in most OECD member countries over the past couple of decades, on average property tax revenue as a share of total local government tax revenue has been quite stable at around 40%. In 2016, the OECD average property tax revenue as a share of local tax revenue was 41.6%.

There are several possible reasons why the property tax is not more heavily utilised in OECD countries.

1. The high visibility of the property tax tends to make it quite unpopular among the public (Cabral and Hoxby, 2012<sup>[2]</sup>; Blöchliger, 2015<sup>[3]</sup>).
2. This unpopularity has led to the enactment in a number of countries of various restrictions imposed by higher level governments on local government property tax rates, revenues, or the growth of property tax bases. To prevent economic hardship on households with low incomes, on the disabled, and on the elderly, most property tax systems include various exemptions, credits or deductions, or discounts targeted to needy taxpayers.
3. Although the extent to which a well-functioning property tax system is regressive is subject to some controversy among economists, a poorly administered system with infrequent reassessment of property values is likely to place heavier burdens on those with limited ability to pay than on those with higher incomes.
4. As property tax liabilities are unrelated to income or cash flows, the property tax may cause hardships for some taxpayers, especially farmers and the elderly. Many countries address this issue with specific policy instruments, such as exemptions, credits, or reliefs.
5. Relative to income or consumption taxes, property taxes are costly to administer. The establishment of a cadastre and a system for assessing the value of property requires a considerable initial investment. In countries with low reliance on the property tax, administrative costs can be high relative to property tax revenues.
6. In a number of countries, the property tax is administered by the central government, with revenues being returned to local jurisdictions. The staff of the national tax administration offices are more used to collecting so-called “modern” taxes such as the value added tax, personal income taxes, and business taxes, all of which are levied on economic flows. Many tax officers appear to have a “cultural” bias against the property tax, which is levied on a stock. Officials of national tax collection agencies are often evaluated on the basis of efficiency indicators, such as collection ratios. They often see the property tax as a tax that is costly to administer and collect relative to the revenues

raised, and thus they focus their main efforts on the more modern central government taxes (United Nations Human Settlements Programme, 2013<sup>[4]</sup>).

7. The buoyancy of the property tax base with respect to economic growth depends on the procedures used to define and update the property tax base. Buoyancy will be relatively high if the assessment of property is based on market values, and assessments are frequently updated. The property tax will be only moderately buoyant if the property tax base is based on rental values that are infrequently updated. The buoyancy of the base will be low if property is reassessed very infrequently, or if the property tax is unrelated to market values, for example, based on area. Israel addressed the issue of revenue buoyancy by adjusting tax rates annual to reflect increases in the consumer price index.
8. Local governments that rely heavily on the property tax risk having to raise property tax rates in periods when market values decline in order to maintain the delivery of local public services. Implementing these tax increases is likely to be politically extremely difficult.

While property tax is a cornerstone of local taxation in many countries in the world, its implementation and management face many obstacles and reforms are particularly difficult to implement. Because of these debates and difficulties, the importance of property taxation began to decline in the early 1980s (OECD/KIPF, 2016<sup>[5]</sup>). But it regained prominence in the wake of the 2008 global crisis, which provided an opportunity to optimise revenue from this tax and to redesign property taxation so that it is economically and fiscally successful. Since, property tax reforms, including cadastral and land registry's reforms, are on the rise in many countries in the OECD (Ireland, Greece, Italy, Slovenia, Denmark, etc.) and the world (Box 2.1).

### Box 2.1. Property tax reforms are on the rise in many countries in the OECD

Numerous OECD countries enacted property tax reforms over the last ten years. Reforms are diverse, including creating a new property tax, imposing a property tax on a new category of owners (legal persons or individual) or assets (land or building), providing local governments with more leeway on tax rates or bases, changing the rates or brackets, reforming land or property registries, modifying valuation methods towards rental or market values or rental value and revaluation processes, etc.

In **Ireland**, a local property tax on residential properties (LPT) was introduced in 2013, in addition to the existing property tax levied commercial properties (commercial rates) 80% of LPT revenue are retained locally for the funding of basic public services, while the remaining 20% are allocated to the equalisation fund. In 2015, new powers were conferred to local authorities to vary the LPT annual rate on valuation by up to 15%, with the aim of increasing their financial autonomy and funding sustainability. As of 2016, 11 local authorities had taken the opportunity to vary the LPT rate, and LPT represented overall 7% of SNG local revenue. Each individual local authority is responsible for the levying and collection of these taxes. The Annual Rate on Valuation (ARV), applied to the valuation of each property as determined by the Valuation Office, is set by the elected members of each local council as part of their annual budget.

In **France**, one of the most notable reforms is France's progressive repeal of the residence tax (*taxe d'habitation*), one of the taxes that make up recurrent property taxation in France with the land tax, the property tax on building, and the business real estate tax (part of the territorial economic contribution). The residence tax is due annually by the household who occupies a dwelling (whether as owner or tenant). The residence tax has largely been perceived as both horizontally and vertically unfair. It is horizontally unfair because the level of the tax varies widely across municipalities and because the notional rental values upon which the tax is based have not been updated since the 1970s. It is vertically unfair because the dwelling tax is regressive with respect to income. In a first attempt to lessen this regressivity, the household residence tax charge has been subject to a ceiling with respect to taxable

household income. In a second step, the abolition of the residence tax has been decided which is phased in over three years so that eligible households will see a 30% reduction in their *taxe d'habitation* bill in 2018, a 65% reduction in 2019 and a 100% reduction in 2020. In May 2018, the government published a report on reforming local taxes, which stated that the *taxe d'habitation* would be completely abolished by 2021 (instead of 80% of households as initially announced). Overall, before the reform, property taxes stood for 59% of subnational government revenue tax revenue and 30% of their total revenue in 2016, representing a major source for municipalities and departments. They amounted to 3.4% of GDP one of the highest levels in the OECD. This high level will, however, decrease with the abolition of the residence tax,

In **Portugal**, a new municipal property tax surcharge of 0.7% and 1% on real estate of a total taxable value respectively above EUR 600 000 and EUR 1 000 000 was introduced in 2016. This surcharge, which replaces the stamp duty on residential urban properties or land for construction of a taxable value above EUR 1 million, aims at enhancing fairness. The reform also introduces a single rate of 0.4% levied on companies' total real estate. Cadastral value of 4.9 million properties were also re-evaluated to underpin the new property tax regime. Revenue from property tax accounted for 0.8% of GDP, 32.4% of SNG tax revenue and 13.2% of SNG total revenue in 2016.

In **Italy**, the property tax on primary residences (ICI) was abolished in 2006 but reintroduced in 2013 under a new single municipal tax (IMU), which incorporates three taxes: 1/ the IMU (*imposta municipale propria*), which is a real estate tax paid by owners of secondary residences only. The taxable base is determined in connection with the value of the property according to the cadastre. The regular tax rate is 0.76% of the taxable base, but municipalities may increase or reduce the rate, with a maximum of 0.3%. 2/ the TASI or "tax for indivisible services" which is a supplementary real estate tax, which is supposed to meet the expenses for the delivery of lighting, street cleaning, green areas and services that are provided equitably by municipalities to all citizens; 3/ and the TARI (waste tax) which must cover the cost of the service of collection and treatment of waste. Both the IMU and the TASI were repealed on primary residences (except luxury homes) in 2014 and 2015. A reform of cadastral values is still pending to fully exploit the potential of the property tax. In 2016, the recurrent property tax accounted for 1.1% of GDP, in line with the OECD average.

In **Greece**, a new property tax (Unified Property Tax, ENFIA) was established in 2014 to replace two previous property taxes, the real estate based wealth tax (FAP) and the property tax that is collected through the Electric company utility bill. The new tax applies to individuals and legal entities owners of land and buildings. The ENFIA comprises a "main tax" and a "supplementary tax". The main tax applies for buildings, plots, fields and so on. The main tax is calculated on the basis of "objective values" based on several criteria such as the location of the property, its size, use, age, the floor on which the property is located, etc. The supplementary tax (so called sumptuary tax) is imposed on very expensive property. The tax rate ranges from 0.1 to 1% of the assessed value. In 2018, the government reassessed the "objective values", resulting in a decrease of paid taxes for 23% of property owners (23%), a stability for 62% and an increase for the remaining 15% of tax payers.

In **Latvia**, the property tax is a "national tax" but fully redistributed to municipalities. It is levied on all land and buildings, either used for residential (since 2010) or commercial purposes. Since 2013, municipalities have leverage over the property tax of which they can now set the rates instead of the central government within limits set by the State and provide rebates. In 2016, it accounted for 15% of local tax revenue, 9% of local revenue and 0.9% of GDP.

In **Germany**, the property tax is currently being reformed, as its valuations date back to 1964 (Western Germany) and even 1935 (Eastern Germany). The Constitutional Court has recently ruled that valuations must be updated by 2024 in an effort to make the tax system more efficient. The

Constitutional Court has given the federal government until the end of 2019 to come up with a new method of calculating the tax.

In the **United Kingdom**, until 2013, the structure of local tax funding in England, Scotland, Wales and Northern Ireland was relatively similar until recently. Over the last years, it has become more divergent ever since then. Traditionally, in England, Scotland and Wales, local councils are funded essentially by the council tax (a property tax based on the rental value of individual property paid by the resident) and a share of the business rates (property tax levied on non-residential properties, whose receipts are pooled and then redistributed by the UK government in England or the devolved nations on a per capita basis).

In England, the Local Government Finance Act 2012 introduced major changes in the English system. Local government taxing power increased in 2013 through the localisation of the local council tax support scheme (LCTS) and of the business rates retention scheme (BRRS). In Scotland, the council tax support was localised to Scotland. The Scottish Government has made changes to the Council Tax multiplier. In Northern Ireland, councils are now legally required to set domestic and non-domestic district rates.

In **Slovenia**, the attempts to introduce a market value-based real estate tax were held to be unconstitutional in 2014. A new reform was however introduced through the Property Tax Act in 2017 to improve its efficiency and to provide for greater fiscal autonomy. The reform broadened the tax base through a new system of valuation of properties, through the Act on mass property valuation, entered into force in January 2019, to be effective in 2020. The tax is levied at different progressive rates depending on the type and value of the premises. They range from 0.10% to 1%. Rates for properties used for business or recreational purposes are higher, at up to 1.5% of value.

Sources: OECD/UCLG (2019<sup>[6]</sup>), *2019 Report of the World Observatory on Subnational Government Finance and Investment*, <http://www.sng-wofi.org>; OECD (2018<sup>[7]</sup>), *Tax Policy Reforms 2018: OECD and Selected Partner Economies*, <https://doi.org/10.1787/26173433>.

Box 2.2 provides a set of principles developed by the OECD to guide efforts to enact property tax reforms.



### Box 2.2. The recurrent tax on immovable property: OECD's guiding principles for reform

1. The taxation of immovable property should be designed so as to be coherent with the overall tax system. In particular, the immovable property tax should be aligned with other forms of capital taxation and with user fees. Taxing immovable property through the income tax system (imputed or actual rent) might reduce the need for a specific immovable property tax, although moving from property taxation to income taxation tends to change overall progressivity of the tax system and the sub-central share of overall tax revenues.
2. Immovable property taxation should cover all types and forms of land use. These include improved and non-improved land for residential and businesses purposes, agricultural land, forests and land dedicated to special infrastructure purposes. The number of untaxed items should be kept to a minimum. The property tax may be paid by property owners, property occupants or both.
3. The property tax should be based on the market value of immovable property. For that reason the fair assessment of property values is crucial for a property tax system to be widely accepted. Property values should be updated frequently, in order to avoid unequal treatment of properties, and taxable values should be determined by reference to assessed values. The use of house price, construction price or consumption price indices can be used as an auxiliary measure to up-rate properties in between re-evaluations.
4. Sub-central governments can be given some autonomy to set property tax rates, and be assigned the revenues from property taxation. The property tax is closely linked to the benefits taxpayers receive from the consumption of sub-central public services, and moreover it is the least prone to sub-central tax competition and tax base erosion. However, upper-level governments should in any case keep a say on the tax base, such as by determining rules for property valuation or tax allowances.
5. Differences in property tax rates between households and businesses should reflect differences in government services provided. While households tend to be the main beneficiaries of sub-central public services, firms also benefit from them. Business property taxation may also act as a backstop against incorporation of households and tax avoidance. On the other hand, the business sector currently faces higher property tax rates than households in most countries.
6. Ideally, land values should be taxed at a higher rate than the values of improvements built on that land (two-tier property tax). On economic grounds, a pure land tax can be justified by the fact that it captures an economic rent and hardly distorts the work, save and investment choices of households and firms. As such, taxing improvements might discourage investment and infrastructure up-grading, especially for businesses. But as it is hard to separate the land value from that of improvements, a pure land tax might be difficult to implement.
7. Low-income households can be entitled to tax allowances and other forms of tax relief and tax liability reductions (means-testing). Also, a lump-sum might be deductible from assessed property values to allow for the uncertainty around the true value of a property. Both measures would make the property tax progressive without the need to introduce progressive tax rates, and are likely to broaden political support for property tax reform. However, the overall consistency of such allowances with other parts of the tax and transfer system must be carefully checked.
8. Property tax reform may provide an opportunity for wider public finance reforms. Higher property tax revenues help upper-level governments in reducing intergovernmental transfers, thereby making local public finance more accountable to taxpayers. Moreover, property tax reform could

go together with reforms aimed at improving the quality of sub-central public services, which again may broaden support for property tax reform.

9. Property tax reform should be phased in to avoid large jumps in tax liabilities and to ensure long-term political success. During transition, tax liabilities should gradually converge to those resulting from fair market valuation. If recurrent property taxation is to replace property transaction taxes, former transaction tax payments could be credited against recurrent property tax payments. Liquidity-constrained households can be allowed to postpone property tax payments until a property is sold or bequeathed (deferral, escrow).
10. Property taxation should rely on a good administrative and judicial framework, and administrative reform might have to go hand in hand with property tax reform. Property taxation should rely on a well-functioning property identification system (cadastre). While the set-up costs of a cadastre may be high, the costs tend to decline once the system is established. Identification, valuation, assessment and enforcement of liabilities should be considered effective and fair by taxpayers. Also, appeal processes should be simple and fast.

Sources: OECD (2016<sup>[8]</sup>), "Property tax principles", CTPA/CFA/WP2(2016)3, Unpublished, OECD Working Party No. 2 on Tax Policy Analysis and Tax Statistics, OECD, Paris; OECD/KIPF (2016<sup>[9]</sup>), "Fiscal federalism 2016: Making decentralisation work", in *Reforming the Tax on Immovable Property*.

## General evaluation of the Arnona

Economists use a standard set of criteria to evaluate tax systems. A list of these criteria includes the following:

- *Revenue sufficiency*: A tax should generate enough revenue to justify its inclusion in a mix of taxes and yield sufficient revenue relative to the costs involved in its administration. Taxes that generate little revenue are often referred to as nuisance taxes.
- *Economic efficiency*: To what extent does a tax effect (distort) the behaviour or actions of individuals or businesses. An efficient tax leads to little or no change in behaviour.
- *Equity*: Considerations of equity involve comparing the amount of taxes individuals (or households) pay relative to some standard such as their income, the size or value of their housing unit, their age or other personal characteristic. *Vertical equity* compares the tax paid, generally relative to income, by individuals at different levels of income. A tax is considered *progressive* if the tax paid relative to income rises with income, and *regressive* if the tax paid relative to income is higher for lower incomes. *Horizontal equity* exists if individuals in similar situations, such as living in houses of equal size or equal value, pay the same amount of taxes.
- *Administrative and compliance costs*: Taxes differ in the amount of money required to administer the tax. Costs include those involved in defining the tax base, determining tax liabilities for individual taxpayers, and collecting the tax. Taxes, especially individual income taxes and many business taxes, place substantial compliance costs on individual taxpayers.
- *Revenue buoyancy and stability*: The revenue generated by most taxes varies over time. Revenues from some taxes, especially taxes on income and business profits, vary in proportion to the strength of the economy. During periods of prosperity, revenues grow, but during economic downturns, revenues can fall dramatically. In contrast, for some other taxes, tax revenues remain largely unchanged over time, whereas the costs of providing public services generally rise. A well-functioning tax system will find a mix between excessive buoyancy and stability.
- *Transparency and simplicity*: Both the structure and administration of taxes should be sufficiently simple and transparent so that taxpayers have faith that the tax is being fairly administered.

Collection rates tend to be lower, when taxpayers have no idea how a tax is being administered and whether they are being treated fairly.

- *Tax autonomy*: For local government officials to be accountable to local residence, it is important that local officials can respond to local public service preferences and needs by being able to adjust the tax rates on local taxes.

The design of a tax system involves making compromises. No tax system performs well in terms of all the criteria. To conduct a full analysis of the *Arnona* system based on the criteria listed above would require a great deal of detailed data on the operation of the *Arnona* within each of Israel's 255 local jurisdictions. The evaluation of the *Arnona* that follows is based on the limited information available and on the experience of property tax systems in other countries. It will highlight both the strengths and the weaknesses of the *Arnona* system.

### ***Revenue sufficiency***

The *Arnona* is the most important source of local government revenue, generating almost two-thirds of the own revenues of regular budgets of local authorities (see Figure 1.8). In 2016, 81.2% of the total tax revenue raised by local governments came from the *Arnona*, a share that is nearly double the OECD average (OECD, 2018<sup>[11]</sup>). Combining the important role played by revenue from taxes in local government finance with the country's heavy reliance on property taxes as a source of local tax revenue, it is not surprising that the share of total local government revenue from property taxation is more than double the OECD average. Revenue from the *Arnona* is certainly sufficient. In fact, given the heavily reliance on the *Arnona*, the government might consider authorizing local governments to use additional taxes and fees.

### ***Economic efficiency***

A tax is considered to be inefficient to the extent that it effects the actions and behaviours of businesses, households, or local governments. The question is not whether a tax influences behaviour, but rather the size or importance of the effects. The government is concerned that the *Arnona* is providing a strong incentive for local governments to discourage new housing constructions and devote an excessive amount of municipal land to commercial and industrial development.

As the *Arnona* is an area-based tax system, it may encourage households to live in smaller housing units and businesses to operate with smaller offices, retail space, or factories. To our knowledge, there has been no evidence that at current rates, the *Arnona* has reduced the consumption of physical space for either residential or non-residential uses.

*Arnona* rates for all types of property vary across local jurisdictions. These rate differences may encourage both households and businesses to move to a jurisdiction that provides a more desirable mix of public services and *Arnona* rates. There is a large literature that shows that these local government fiscal conditions are at least partially capitalized into higher or lower property values. Although the issues are complex, these fiscally-motivated moves may be efficiency enhancing, especially if they encourage local governments to operate more efficiently and respond more effectively to the preferences of their residents.

*Arnona* rates within any given local jurisdiction differ substantially by type of property. The differences among non-residential properties are particularly large. For example, in 2016, the average rate on parking lots was NIS 25 (per square meter), on hotels, NIS 61, on industry, NIS 71, on office and retail trade, NIS 109, and on banks and insurance companies, NIS 850. The reason for these rate differences is unclear. It is difficult to imagine an economic argument that could be used to justify or explain these differences. Because land is more or less in fixed supply, a tax on land values is highly efficient as it will not distort behaviour. This has led economists to argue that higher tax rates on land are desirable because they will encourage development (Oates and Schwab, 2009<sup>[9]</sup>). This argument suggests that parking lots, which are essentially vacant land usually located in central urban locations, should be taxed at high rates. The average *Arnona* rates on parking lots are, however, quite low.

The observed *Arnona* rate differences across types of non-residential property are sufficiently large to create locational inefficiencies. Although the OECD was not provided with parcel-level data on land use, it is reasonable to hypothesize that, for example, high *Arnona* rates on banks and insurance companies discouraged banks and insurance companies from locating in certain jurisdictions, especially those with especially high *Arnona* rates. The result is both inefficient and it creates hardships on local residents in need of banking or insurance services.

### **Equity**

Most discussions of the equity of the property tax focus on the tax paid by households relative to their *ability to pay* and relative to the tax paid by households residing in housing units of similar value. Israel has developed an area-based system as a proxy for market value. Horne and Felsenstein in (Horne and Felsenstein, 2010<sub>[10]</sub>) describe the area-based system as an “alternative assessment” method designed to provide a substitute for property valuation. Assessing how well the *Arnona* system mimics a value-based property tax system is extremely difficult. Because of limited parcel-level and household data, there is no comprehensive evidence on the link between *Arnona* payments, housing values, and household incomes.

Two academic studies, however, shed some light on the issue. Portnov et al. (2000<sub>[11]</sub>) do not directly address the question of tax equity, but present evidence that differences in per capita *Arnona* collections “reflect factors that would normally be expected to influence property market values.” These factors include the population size of local authorities, their distance from the center of the country, average income, and their ethnic and socio-religious composition. In a more recent study, Horne and Felsenstein (Horne and Felsenstein, 2010<sub>[10]</sub>) draw on detailed data from the Israeli Household Expenditure Surveys from 1997 through 2005 to analyse the relationship between property values, household income (measured by total household expenditures), and the actual *Arnona* tax paid. Whereas they find that property tax payments are strongly correlated with property values, they also find that a percentage point increase in both expenditures and in housing values was associated with a less than percentage point increase of *Arnona* payments. This result leads them to conclude that the residential *Arnona* is a regressive tax.

It is important to note that several aspects of the *Arnona* system are designed explicitly to reduce regressivity. The government has established several categories of “needy” individuals and households that are entitled to exemptions and discounts to their *Arnona* charges. In 2017, local governments issued NIS 3.4 billion in exemptions, releases, and discounts. Although no detailed data are available, these reductions in *Arnona* tax liabilities went primarily to households with relatively low incomes. First, in some jurisdictions, spatial zones are defined to include areas with concentrations of luxury housing. Residents of these zones are subject to higher *Arnona* rates. While these local authority efforts to apply higher *Arnona* rates to certain residential sub-classifications (subject to ministerial approval) undoubtedly increase tax progressivity, Horne and Felsenstein (Horne and Felsenstein, 2010<sub>[10]</sub>) argue that within jurisdiction residential rate differences are not large enough to convert the *Arnona* into a progressive tax.

One reason that it is difficult to increase progressivity using an area-based system is that households living in identically-sized apartments in the same neighbourhood or in the same building face the same tax liability independent of their income or the value of their housing unit. Some residents will do major renovations, such as new kitchens and bathrooms, while others will fail to do regular maintenance. The market value of apartments on the top floors of residential apartment buildings are generally substantially higher than the value of identically-sized apartments on lower floors. None of these differences in property value will be reflected in *Arnona* liabilities.

Horizontal inequities in a value-based property tax system exist when within the same jurisdiction, two households in similar valued housing units face different tax bills. In an area-based system, intra-jurisdictional horizontal inequities exist if taxpayers with similarly sized housing units or businesses face substantially different tax liabilities. Some jurisdictions are divided into zones, with different tax rates applied to residents of each zone. Urban areas in particular tend to be quite heterogeneous in terms of

income, property values, and socio-economic characteristics. As a result, within one jurisdiction, identical households (along any number of dimensions) who live in similar sized housing units will face different *Arnona* rates if they live in different zones.

One contributor to inter-jurisdictional horizontal inequities is that different jurisdictions follow different approaches to the measurement of taxable area. In some municipalities, taxable area includes a portion of the common space in a building, such as staircases, the lobby, or a common storage room. In other local authorities, the taxable area excludes common areas but includes the footprint of the external walls of the building. A third approach is based on the usable space of an apartment, excluding both wall footprints and common space. The use of the different methods of area measurement results in 14% to 29% differences in the taxable area of the same apartment (Daran, 1999<sup>[12]</sup>).

### **Administrative costs**

The costs of administering an area-based property tax system are lower than the costs of administering a value-based system. While all property tax systems require the creation and maintenance of a cadastre, the sending out of tax bills, and efforts involved in collecting taxes from delinquent taxpayers, a value-based system, by definition, must undertake the process of both determining and updating property values.

Local governments in Israel are responsible for establishing and maintaining records of the households and businesses that occupy each parcel of land within jurisdiction boundaries. Local jurisdictions must determine both the criteria for measuring area, and undertake the measurement of area according to the established criteria. The calculation of the tax levied on each parcel also requires information on the location of the property, the age of the property, and how the property is being used. While this process appears to be simple, the fact that most local governments utilize many sub-categories of property, especially for non-residential property, makes the *Arnona* system more complex, and undoubtedly adds to the cost of administration.

Unfortunately, no data from individual local governments on the costs of administering the *Arnona* were made available to the OECD mission. However, Dan Daran (1999<sup>[12]</sup>), a former deputy mayor of Tel Aviv, reported that in 1997 the cost of implementing the *Arnona* system in Tel Aviv was approximately NIS 24 million. This amount was equivalent to 1.6% of the *Arnona* revenue in that year. Officials in the Ministry of Finance suggested that on average the costs of administering the *Arnona* were between 0.4% and 0.5% of total *Arnona* charges.

Without detailed data on the administrative costs associated with the *Arnona*, it is difficult to assess whether some jurisdictions are substantially more efficient in the administration and collection of the *Arnona* compared to others. It would also be useful to know whether there exist substantial scale economies in the administration and collection of the *Arnona*, whether regional collaboration in *Arnona* administration may be cost effective, and whether the use of private collection companies reduces collection costs. Knowledge of the relationship between collection rates—measured as *Arnona* revenue as a percentage of net *Arnona* charges—and spending on tax administration would also help in the design of policies to improve collection rates. Finally, in considering possible reforms to the *Arnona*, it would be important to assess by how much administrative and collection costs would rise if Israel moved from an area-based property tax system to one based on market values or rental values.

The costs involved in moving from an area-based to a value-based system are clearly lower when a country already has, as in Israel, a well-functioning property market. Ron Rakow (2009<sup>[13]</sup>), one of the leading experts on property tax administration in the United States, argues that “the difference in administrative costs between an area-based system versus a value-based system is not that great. If Israel has a good system for recording property transactions, including sales prices, and a digitized land records system linked to GIS, then it is well on its way to having the ingredients for a value-based system.” Property assessors argue that the two most important factors in determining the value of property are location and size. As

long as both of these are known, it is not terribly difficult or expensive to develop a reasonably accurate assessment valuation model.

Box 2.3 provides information on how recent advances in technology, including the use of artificial intelligence (AI) are dramatically reducing the costs of implementing value-based assessment systems. Box 2.4 highlights some information on the organisation and implementation of property assessment in France and the United States.

### Box 2.3. The role of new technology in the valuation of property

The most common tool used by many jurisdictions to determine the value of residential property is the implementation of automated valuation models (AVMs). These models use techniques, such as geographically weighted regressions to produce estimates of market values. Quite accurate estimates can usually be made using a relatively limited amount of data. Artificial intelligence (AI) is also being used with AVMs, and has been producing excellent results at a relatively low cost.

The technology for collecting data on structures has also advanced. Light Detection and Ranging (LIDAR), a remote sensing methodology that uses light in the form of a pulsed laser, when combined with AI can provide a low cost method for collecting data attributes for the exterior of buildings. Drones are also beginning to be used for data collection for assessment purposes. These techniques can identify physical changes, such as property additions, swimming pools, parking lots or even roof changes. Assessors can use these techniques to generate a priority list of properties that should be targeted for special attention using more traditional assessing and appraisal techniques.

### Box 2.4. Property taxes assessment costs: examples from France and the United States

In unitary countries, the assessment (and collection) of local government taxes is often the responsibility of the central tax administration, sometimes with local officials being responsible for providing property assessments. The assessment and the collection of the local property taxes entail administrative costs, which are sometimes charged to the local governments. The central government retains a portion of the revenue raised to cover administrative costs. Often these costs are not itemised, by the central tax administration, leading local governments to suspect that these costs are overestimated. In France, the issue of over-charging for the administrative costs of tax collection was the subject of a recent report by the French Cour des Comptes (2017).

In the United States, individual state governments determine how property will be assessed and how property tax collected. In most states, the assessment and collection of the property tax is a local government responsibility, often with some state government oversight. Because of different institutional arrangements and the large variation in the size of local governments, one observes large differences in the cost of assessment.

In 2013 the International Association of Assessment Officials (IAAO) conducted a membership survey on the costs of property tax assessment in the U.S. The survey asked whether assessment was carried out by a state agency, a public agency serving either a single county/parish, or a single municipality/city, or a single town. The survey also asked whether assessment offices served multiple local authorities. The survey results, reported in Walters and IAAO Research Committee (2014<sup>[14]</sup>), showed that there are substantial economies of scale in the assessment of property. The number of employees per parcel decreases by 25% from small assessment agencies to the largest ones. Not surprisingly, the larger assessment organisations have better access to technology than the smaller ones. As a result, the total

cost per employee increases with the size of the assessment agency, but the average cost per parcel is 25% lower in larger units than in smaller ones. The cost per parcel does vary with the type of assessment agency; it is two times higher in state or city agencies than in private agencies serving multiple jurisdictions. However, the private agencies have better access to technology, and their employees benefit from higher salaries than employees in public assessment offices.

The survey also reported that the average assessing cost per parcel of property was approximately \$26. Based on U.S. Census Bureau data from the American Community Survey, the median property taxes paid on owner-occupied homes was \$2,150 (a five-year average statistic for the years 2011-2015). On the basis of these numbers, the costs of assessing residential property are about 1.2% of the revenue raised. This percentage would probably be lower in locations where assessments are carried out less frequently.

Sources: Walters, L.C. and IAAO Research Committee (2014<sup>[14]</sup>), "Staffing in assessment offices in the United States and Canada: Results of 2013 survey", *Journal of Property Tax Assessment & Administration*, Vol. 11/2, pp. 5-62; Cour des Comptes (2017).

### ***Buoyancy/stability***

As compared to property values, which can grow rapidly in boom periods, and decline during recessions, taxable areas are relatively stable over time. To assure that *Arnona* revenues grow as the costs of providing public services increases, *Arnona* rates are increased annually to reflect changes in the Israeli cost-of-living index. The resulting modest annual increases in the *Arnona* charges faced by households and businesses are likely to enhance the political acceptance of the tax. Also, linkage of *Arnona* rates to the cost-of-living index assures the steady flow of income for local governments even during downturns in property markets (Daran, 1999<sup>[12]</sup>).

### ***Transparency and simplicity***

At first blush, the *Arnona* is a simple and transparent tax, depending only on a few easy-to-measure factors, area, age, locations, and type of use. Complexity arises when local governments, in an attempt to increase the fairness of the tax, add additional sub-categories to the type of use classification scheme, add spatial zones with separate tax rates, or special discounts for specified groups of taxpayers. It is the understanding of the OECD team that information on each parcel of property, such as size, age, and *Arnona* charge is neither publicly available, nor reported to the Ministry of Finance and/or the Ministry of the Interior. This lack of transparency makes analysis of the implementation of the *Arnona* very difficult if not impossible. In many parts of the United States, physical characteristics of each property, including age and size, and the assessed market value of the property are all easily available on a public website maintained by local governments.

### ***Autonomy***

Since the mid-1990s the OECD has been conducting periodic studies of the degree of tax autonomy among state/provincial and local governments in OECD member countries. The OECD has developed a taxonomy to describe the degree of tax autonomy that exists at the subnational level in each country. As part of the taxonomy, a country whose local governments set their own tax rates and tax reliefs without having to consult a higher level government is assigned code "a1". A country where the central government sets local government tax rates and defines tax bases is coded as "e". Varying degrees of limitations to full autonomy, including tax sharing, are given "b", "c", or "d" codes. In the latest available tax autonomy analysis, over 95% of the tax revenue raise by local governments in Israel is assigned a code of "e",

reflecting the fact that *Arnona* rates are set by the central government and any changes to those rates must be approved by the Ministries of Finance and Interior (OECD, 2019<sup>[15]</sup>).

Despite their very limited autonomy with respect to tax rates, local governments have discretion over how they choose to measure the area subject to the *Arnona*, the definition of sub-classifications of the major types of property, and some degree of discretion over the awarding of *Arnona* exemptions and discounts. As discussed above, this limited autonomy comes at the cost of increasing horizontal inequities in the *Arnona* system both within and across local jurisdictions. It also increases the complexity of the system and reduces transparency.

### **Summary evaluation**

The *Arnona* is the main source of tax revenues for local governments. It provides a growing, yet stable source of revenue for local governments, and is relatively inexpensive to administer. Compared with other possible sources of local government tax revenue, the *Arnona* is a quite efficient tax. However, as will be discussed in the next section, the *Arnona* creates an incentive for local governments to discourage new housing development in favour of, in some cases, excessive non-residential development. Although the absence of data prevents a complete evaluation of tax equity, it appears that the *Arnona* is a regressive tax and that *Arnona* payments differ substantially among households in similar economic situations. If the *Arnona* were a more transparent tax, it is likely that these inequities would increase public opposition to the tax.

### **The impact of *Arnona* on land-use decisions**

There is a widely-held view that the *Arnona* system has adverse effects on the land-use and planning decisions of local governments in Israel (Eckstein et al., 2014<sup>[16]</sup>; Gruber, 2014<sup>[17]</sup>; Fitoussi, Yakir and Sarel, 2016<sup>[18]</sup>). The basic argument is that the *Arnona* incentivizes local governments to discourage new residential development, particularly for low and moderately priced housing units, and encourages local governments to reserve too much land for commercial and industrial use.

Although precise calculations are hard to find, it appears that, with the exception of high-income households, the costs of providing public services to new residents exceed the revenue associated with these new residents. The additional revenue comes primarily from the *Arnona* paid by new residents and from increases in formula-based central government grant revenues attributable to an increase in local government population. The gap between the costs of providing public services and the revenue generated by new residents is particularly large for residents who qualify for *Arnona* exemptions, reliefs, or discounts. Low-income households, the disabled, and the elderly, are not only eligible for discounts, but are likely to have above-average needs for local government-provided public services.

In contrast, the local tax revenue generated by new commercial and industrial development is likely to substantially exceed the costs of the public services required by the new development. A major reason that commercial and industrial development generates a fiscal surplus is that, as shown in Table 1.4, non-residential *Arnona* rates are much higher than residential rates.

The fiscal calculus described above provides an incentive for local governments to use the planning and land-use tools available to them to discourage new residential development and to encourage the expansion of non-residential developments. While responding to these incentives may strengthen the short-run fiscal condition of local governments, from a national perspective, these actions are likely to have serious adverse consequences.

Over the past five years, Israel's population has grown at an annual rate of about 2.0%. This population growth has exacerbated problems of inadequate housing supply in many local communities. A consequence of inadequate housing supply is a rise in housing prices and a growing problem of housing



affordability. The fact that the additional local government revenues associated with new residents is inadequate to cover the costs of providing services for these new residents discourages local governments from developing new housing. For example, the City of Netanya, despite a shortage of affordable apartments, has, in recent years, focused on developing large, luxury apartments designed to attract new high-income residents (OECD, 2017<sup>[19]</sup>).

The potential fiscal benefits of non-residential development have encouraged many local governments to aggressively develop industrial parks or commercial-industrial zones. If these zones are successful in attracting new commercial and industrial development, they will likely generate a substantial amount of local government tax revenue that can support a robust level of public services. However, developing an industrial park is no guarantee that it will attract new enterprises. In recent years, a number of local jurisdictions have discovered that the supply of land available for commercial and industrial development exceeds the market demand. Especially in the North and South, away from the Tel Aviv-Jerusalem axis, many established commercial-industrial parks remain largely empty. The result is that land will remain unused and unavailable for alternative uses, including for new housing development.

Although Israel's *Arnona* system is quite unique, the fact that local government taxes can influence land use and planning decisions is a widely observed phenomena throughout the world. Local governments nearly everywhere have an incentive to assure that they have enough revenue available to provide the public services for which they are responsible. Different local tax systems will imply different patterns of land-use incentives. For example, local governments with access to a sales (or consumption) tax, have an incentive to zone land for retail development.

The term, the *fiscalisation of land-use*, is often used to describe local government land-use decisions that are influenced by the perceived impact of economic development on the future revenues and spending of local governments. In a number of countries, local governments routinely conduct “fiscal impact analyses” to help them determine what kind of land use to encourage and what kind to discourage. The results of these analyses are often used to discourage or zone out moderate-income housing, or housing units that are appropriate for families, under the assumption that the extra property tax revenue from these new housing units will be insufficient to finance the extra costs, especially for public education, associated with new residents.

Fiscal impact analyses are frequently criticised for their overly narrow and short-term perspective. While housing units for families may result in increased education costs, in some circumstances additional students result in substantial increases in grants for higher-level governments in support of education. Zoning out moderate-income may be short-sighted, as it may make it harder for businesses to find workers, and ultimately end up discouraging commercial and industrial development. Blöchliger et al. (2017<sup>[20]</sup>) provide a number of examples from various countries of the influence of fiscal policies on the land-use decisions of local governments. For example, they cite a study that showed that after the United Kingdom shifted the taxation of commercial property from local governments to the central governments, local governments took steps to discourage new commercial development.

In Israel, the substantially higher *Arnona* rate on non-residential property as compared with residential property encourages local governments to strongly favour new commercial-industrial development to new residential development. However, evidence from the United States indicates that fiscal incentive to favour non-residential development exist even when residential and non-residential property face identical property tax rates. In some U.S. states, for example, in Wisconsin, the state constitution requires that within a local jurisdiction, residential and non-residential property tax rates must be identical. Despite this uniformity requirement, local governments often prefer new business development because they believe that new non-residential development generates more revenue and requires less spending on services than most new residential development.

Compared with other countries that utilize the property tax as a source of local government funding, local governments in Israel have little control over their property tax revenues. They have limited ability to adjust

*Arnona* rates and to determine criteria for awarding *Arnona* discounts. As a result, the fiscal benefits of new residential development are modest, and may well be negative. In countries that utilize value-based property tax systems, successful new residential developments generate increased property tax revenues as property values grow. One can think of a value-based property tax system as a mechanism for local governments to capture some of the increased property value that is attributable to local government decisions with respect to zoning, the issuance of building permits, and the creation of public infrastructure that enables the new development. With an area-based system, the potential revenue benefits of new development are limited. This is especially true if high housing prices lead households to prefer smaller housing units.

A recent report published by the Kohelet Policy Forum (Fitoussi, Yakir and Sarel, 2016<sup>[18]</sup>), an analysis of the Israeli housing market by Noam Gruber (2014<sup>[17]</sup>), and an OECD (2017<sup>[19]</sup>) study of spatial planning and policy all discuss several barriers to increasing housing supply in Israel. Although they highlight the negative incentives towards housing development attributable to the *Arnona* system, they also discuss several other factors that deter increases in housing supply.

Over 90% of land in Israel is publicly owned. To determine the use of this land, to ensure adequate land for agriculture, and to protect environmentally sensitive land from development, Israel has a highly centralized planning system. Although recent legislation has decentralized some planning authority, the overall planning system remains complex, hierarchical, and highly bureaucratic (OECD, 2017<sup>[19]</sup>; Gruber, 2014<sup>[17]</sup>). As a consequence, the process of obtaining planning approval and a building permit for a new residential development took over a decade (Gruber, 2014<sup>[17]</sup>). This is in sharp contrast to the situation in many OECD countries, where the approval process is often completed in a matter of months.

As a mechanism for increasing housing supply and for addressing the long delays in the planning and approval process, the government in 2013 authorized the establishment of “umbrella agreements” (*Heskem Gag*) with local governments (Eshel and Hananel, 2019<sup>[21]</sup>). Under the terms of these agreements, the government would agree to sell land to local governments for the express purpose of building large-scale housing developments. As part of the agreements, the planning approval process and the issuance of building permits would be “fast tracked”. As with all new development, local governments would be able to levy development fees that would cover a portion of the public infrastructure needed to support the new housing developments.

The decision to establish umbrella agreements appears to be a recognition that the complex and very slow process of gaining planning approval for new residential development was a critical factor in limiting housing supply. Furthermore, the inclusion of a substantial per housing unit grants to some local governments signals that the government recognizes that some local governments need additional resources to finance the physical infrastructure necessary to support new residential development. This infrastructure includes water and sewer lines, streets and street lights, plus new public facilities such as school buildings, recreation facilities, and parks.

Although over 90% of land in Israel is publicly owned, about 50% of new construction is occurring on privately-owned land (Gruber, 2014<sup>[17]</sup>). Nevertheless, substantial hurdles exist for increasing housing development on privately-owned land. Even with recent reforms, the process of obtaining building permits is complex and time-consuming. These problems appear to be particularly severe in Arab-dominated communities, where most of the land is privately owned. Requirements that land cannot be sold for development unless a portion is given over for public use further constrains the development of new housing.

Reforms to the *Arnona* system have the potential to increase local governments’ incentives to expand the development of new housing. However, the impact of any reform is likely to be limited unless it guarantees local governments sufficient revenues – from development fees or from government grants – to finance the infrastructure and operating cost of the public services needed to support the new development.

## The adequacy of local government public services

A complete analysis of the financing of local governments includes not only a discussion of local government revenues, but also consideration of the delivery of public services for which local governments are responsible. This section will focus primarily on the regular budgets of local authorities. While the construction of capital infrastructure is crucially important in local governments' ability to provide public services, we lack data on both the details of the irregular budgets of local authorities and on their inventories of capital infrastructure. Also, the *Arnona*, the central focus of this report, plays only a minor role in financing infrastructure.

The discussion in this section starts with an analysis of the pattern of per capita spending from the regular budgets of local governments on the major types of expenditures. That discussion is followed by a closer look at local governments' two major delegated functions, education and social welfare. Available information on the number of local government residents served, namely students and social welfare clients, allows for a fuller discussion of the adequacy of funding for these two important public services.

### **Local government per capita expenditures by function**

Table 2.1 presents descriptive statistics on per capita spending from regular budgets by major expenditure functions. Average per capita expenditures in 2017 was NIS 7 854, but median per capita spending was significantly lower (NIS 7 172), revealing that a number of local authorities have relatively low per capita expenditures. Whether based on comparing standard deviations to averages or observing the range of per capita spending, the variation in spending across local jurisdictions is quite large. For total per capita expenditures, the standard deviation is 38% of the average, and the range is from NIS 3 481 to 22 741.

The bottom panel of Table 2.1 illustrates average spending differences across socio-economic clusters. Except for the top cluster, which has a very high level of per capita total spending, the difference in average per capita spending across clusters are modest. However, within clusters there is a substantial amount of variation in per capita spending across all expenditure functions.

**Table 2.1. Per capita expenditure of local governments by function (regular budget), 2017**

	Total expenditures	Delegated functions				Statutory functions			Discretionary Services
		Education	Welfare	Culture	Other	Gov't admin.	Water and sewer	Other	
Average	8 204	2 987	888	397	103	902	415	1 490	1 021
Standard deviation	6 313	1 886	375	446	161	794	695	2 297	1 159
Minimum	3 481	1 091	204	37	0	228	0	375	123
Maximum	96 565	17 649	2 829	5 302	2 281	12 161	8 042	35 851	15 537
Median	7 174	2 606	819	306	73	796	156	1 277	821
<i>Socio-economic cluster</i>									
1 (lowest)	8 549	5 091	1 165	212	40	480	325	535	702
2	6 088	2 413	920	197	50	688	321	732	767
3	6 817	2 560	880	341	72	827	248	1 016	874
4	7 298	2 531	1 002	302	98	897	239	1 178	1 050
5	8 327	2 849	1 155	375	121	952	312	1 466	1 098
6	12 489	3 750	967	606	220	1 363	719	2 990	1 875

	Total expenditures	Delegated functions				Statutory functions			Discretionary
		Education	Welfare	Culture	Other	Gov't admin.	Water and sewer	Other	Services
7	8 838	3 206	821	449	119	942	639	1 680	983
8	7 874	2 965	628	453	91	873	349	1 566	949
9	7 850	3 063	496	397	89	865	531	1 860	550
10 (highest)	16 583	2 628	663	2 750	254	1 646	1 394	6 255	991

Source: OECD calculations using Central Bureau of Statistics local government data.

Table 2.2 illustrates the differences across socio-economic clusters in how per capita spending varies among expenditure functions. The differences are quite large. The share of expenditures devoted to delegated functions (mainly education, social welfare and culture) is on average 54.7% of total expenditures. In cluster 1, however, it represents more than 76% of total spending, and in cluster 10, only 38%. Among delegated functions, 60% of total spending goes towards education in cluster 1, 39% in cluster 9, and only 16% in cluster 10. The share of total expenditures devoted to social welfare in the highest clusters is about half of the share in the bottom clusters. On average, spending on statutory functions (mainly general administration, water and sewage) represent approximately one third of total expenditure. The dispersion on general administration expenses per capita is relatively low suggesting that the costs of managing local authorities are more or less proportional to population across the clusters. The same pattern applies to per capita expenditures on water and sewage.

**Table 2.2. Percentage distribution of local government spending by function (regular budget), 2017**

Socio-economic cluster	Total (%)	Delegated functions (%)				Statutory functions (%)			Discretionary (%)
	Expenditures	Education	Welfare	Culture	Other	Gov't admin.	Water and sewer	Other	Services
1 (lowest)	100.0	59.5	13.6	2.5	0.5	5.6	3.8	6.3	8.2
2	100.0	39.6	15.1	3.2	0.8	11.3	5.3	12.0	12.6
3	100.0	37.6	12.9	5.0	1.1	12.1	3.6	14.9	12.8
4	100.0	34.7	13.7	4.1	1.3	12.3	3.3	16.1	14.4
5	100.0	34.2	13.9	4.5	1.5	11.4	3.7	17.6	13.2
6	100.0	30.0	7.7	4.8	1.8	10.9	5.8	23.9	15.0
7	100.0	36.3	9.3	5.1	1.3	10.7	7.2	19.0	11.1
8	100.0	37.7	8.0	5.8	1.2	11.1	4.4	19.9	12.1
9	100.0	39.0	6.3	5.1	1.1	11.0	6.8	23.7	7.0
10 (highest)	100.0	15.8	4.0	16.6	1.5	9.9	8.4	37.7	6.0
<b>Average</b>	<b>100.0</b>	<b>36.4</b>	<b>10.8</b>	<b>4.8</b>	<b>1.3</b>	<b>11.0</b>	<b>5.1</b>	<b>18.2</b>	<b>12.4</b>

Source: OECD calculations using Central Bureau of Statistics local government data.

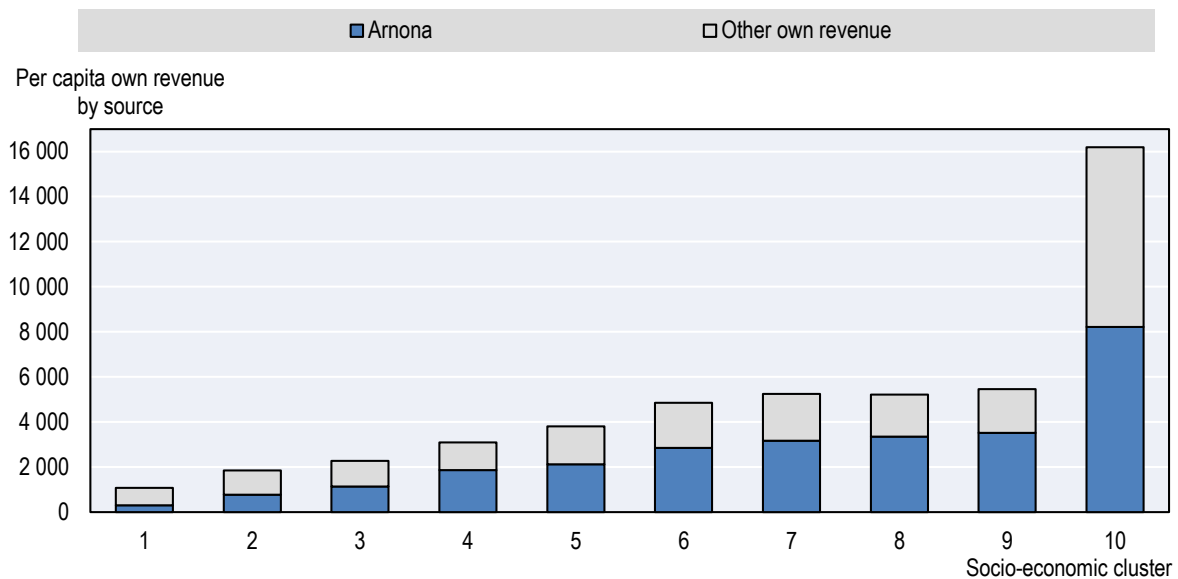
The category of spending that varies the most across socio-economic clusters is “other statutory functions.” While only about 6% of total spending goes to this category in cluster 1, nearly a quarter of total spending in cluster 9 and over a third of spending in cluster 10 are devoted to other statutory functions. This pattern reflects the fact that per capita own revenue is substantially higher in higher-numbered clusters than in lower-numbered clusters. In addition, fiscal needs related to delegated functions use up nearly all available

resources in many jurisdictions in the low-numbered clusters. The result is that jurisdictions in low-numbered clusters end up with very little discretionary revenue to spend on other statutory or discretionary functions.

The differences in per capita expenditures illustrated in Tables 2.1 and 2.2 arise for several reasons. The majority of local government spending goes to delegated functions. Thus, local government must perform these functions, and the amount of spending on these functions will depend to a large degree on the minimum amount of money needed to perform these functions. Economists refer to these minimum amounts as *costs*. Take the example of education. The Ministry of Education defines a set of educational standards and then provides local authorities with a grant that funds most, but not all, of the spending that the ministry believe each local government will need to meet its educational standards. The amount of money will depend on the number of students and on a set of other factors that reflect differences in per pupil costs of achieving the standards. Resource costs required to educate students are likely to depend on whether they come from Hebrew-speaking families, have mental or physical disabilities, or are being raised in poor families. Together these factors, most of which are out of the control of local authorities, will determine the fiscal needs of each *jurisdiction*. Actual spending may differ from fiscal needs for a number of reasons. Some local governments will choose to provide education in ways that are more expensive than in other communities, some local jurisdictions will waste resources, while other local governments, particular those with higher levels of own resources, and thus in higher socio-economic clusters, will choose to provide higher quality or supplemental education for their students.

As noted in Table 2.1, except for cluster 10, average expenditures per capita are quite similar across clusters. In contrast, as shown in Figure 2.1, both per capita *Arnona* revenues and other own-source revenues rise as socio-economic conditions improve. *Arnona* revenues per capita in cluster 1 are only NIS 296, but they rise steadily as one moves to higher clusters. In cluster 9, average per capita *Arnona* revenues are NIS 3 513. Other revenues raised by local governments average NIS 769 per capita in cluster 1 and rise to NIS 1 937 per capita in cluster 9. Average per capita spending, however, is actually NIS 700 higher in cluster 1 than it is in cluster 9. There are two reasons for this pattern of own revenue and spending. First, grants from the central government play a much more important role in funding expenditures in jurisdictions in low socio-economic clusters, with some grants being targeted to jurisdictions with low socio-economic index values. Second, except for local governments in the highest socio-economic clusters, spending by local authorities is almost entirely on delegated functions and on required statutory functions. Local authorities thus have very little spending autonomy, and given the distribution of transfers, almost no options for using own resources to increase spending levels.

Figure 2.1. Per capita own revenue by source, 2017



Note: Havel Eilat and Tamar are not included in these calculations.

Source: OECD calculations using data from the Central Bureau of Statistics.

### ***The funding of public education***

The central government delegates to local governments the responsibility for providing primary and secondary education. At the same time, the central government gives local governments categorical grants that must be spent on public education. Local governments operate schools. Subject to available resources, they supplement central government education grants with their own revenue raised from the *Arnona* or from other local sources. In this section, we ask the following questions:

- Does this system of financing public education work well?
- Do all students receive a high-quality education?
- Do government grants provide enough resources to local governments to compensate for limited *Arnona* revenue?

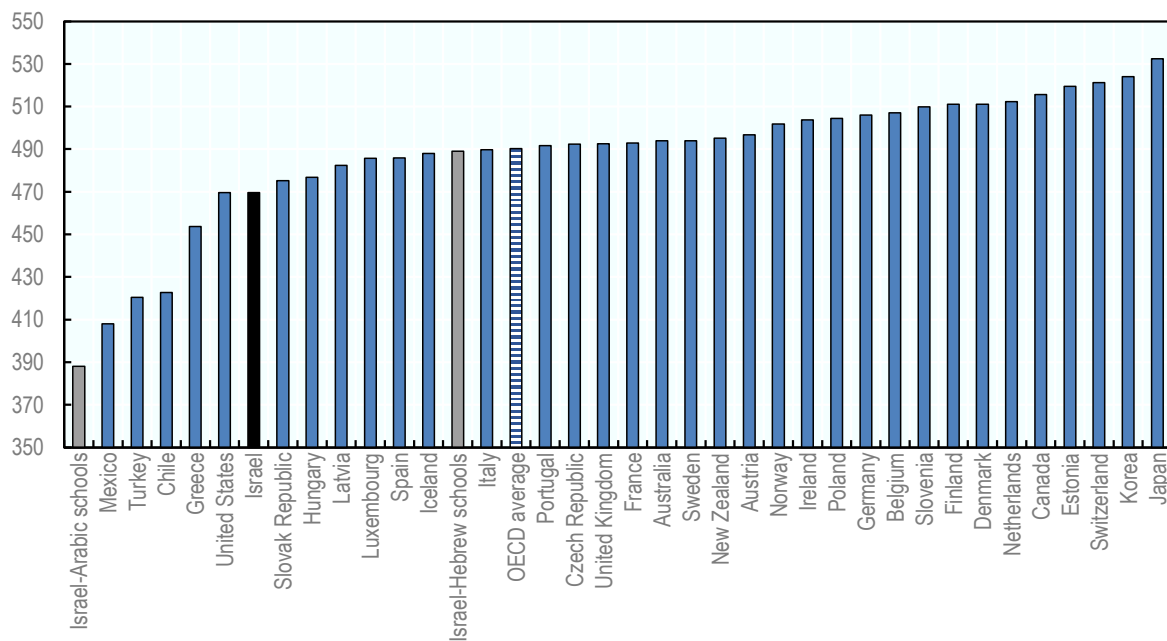
Although Israel's investment in public education has increased substantially in the past few years, and average student academic performance has risen, it is widely accepted that large inequities continue to exist within the current system (Blass, 2018<sup>[22]</sup>; Ben-David, 2018<sup>[23]</sup>; Gruber, 2017<sup>[24]</sup>; Wolff, 2017<sup>[25]</sup>). While it is recognized that standardized testing provides an imperfect measure of the quality of education, both national tests (Meitzav) and international tests (TIMMS and PISA) show both relatively low performance of Israeli schools relative to schools in other OECD countries, and large differences in academic performance between Hebrew and Arabic schools. For example, Figure 2.2 provides a comparison of the performance of 15-year old students on the PISA mathematics test.

The most recently available PISA results show clearly that academic performance in Israel is substantially below the OECD average. The results in Figure 2.2 are from the mathematics test taken by 15-year old students. Qualitatively similar results are found for the reading and the science assessments. In 2015, there were wide differences in the mathematics performance of students in Hebrew schools (state or religious schools) and student in Arabic schools. The students in the Hebrew schools performed at about the OECD average, whereas the performance of students in the Arabic schools was below the average achievement level in all OECD countries. Student testing within Israel finds that within the Hebrew and

Arabic groups, large differences exist in the academic performance of Haredi students and other Jewish students, and between Bedouins and other Arabic-speaking students.

**Figure 2.2. Programme for International Student Assessment (PISA), mathematics scores**

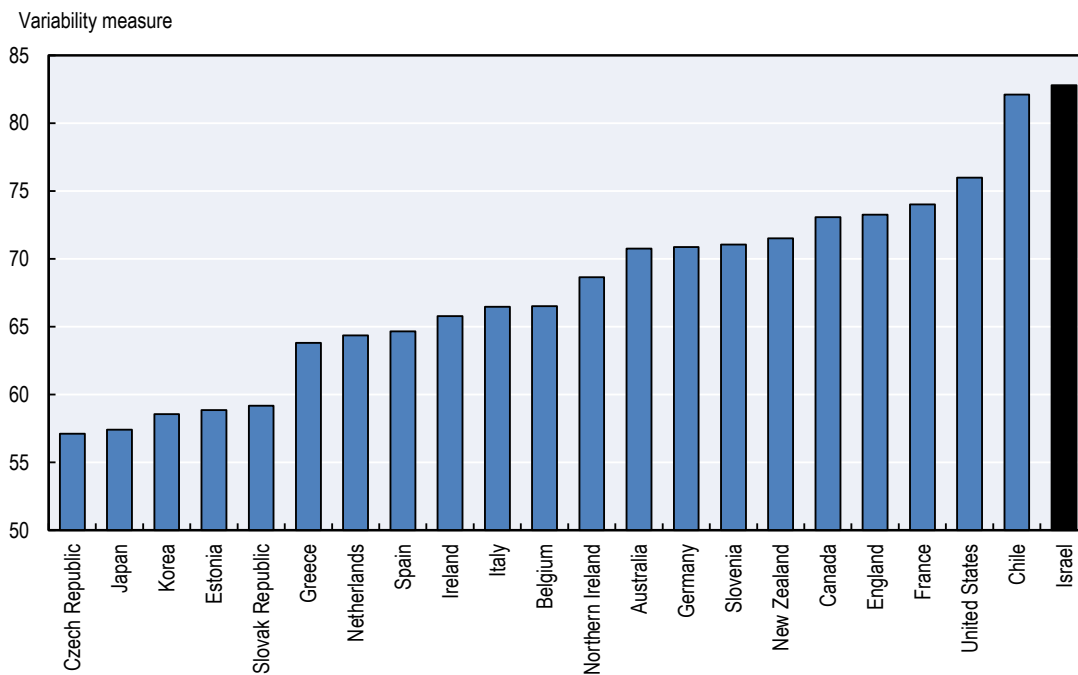
15-Year-Old Students, OECD Countries, 2015



Source: OECD (2015<sup>[26]</sup>), *Programme for International Student Assessment (PISA), 2015 Mathematics Assessment*, OECD, Paris.

These wide differences in academic performance are not surprisingly reflected in the distribution of skill levels of Israeli adults. The OECD has studied the variation in training and skill levels within OECD countries. As shown in Figure 2.3, the within country variation in skills is higher in Israel than in a broad selection of OECD member countries. These skill disparities translate directly into differences in labor productivity and income. Although not the sole determinant, these skill differences are an important contributor to poverty and income inequality in Israel (OECD, 2018<sup>[27]</sup>). Skill differences are particularly pronounced in some communities. Large wage gaps between Israeli-Arabs and Haredim, and the rest of the population can be for the most part explained by differences in skill levels. Israeli labor market is highly polarized between sectors supplying high-quality jobs for high-skilled workers and low productivity sectors, which attract workers with limited skills.

Figure 2.3. Variability in skill levels, selected OECD countries



Note: The measure of variability is the interquartile range, which is the difference between the third and first quartiles in the distribution of skills. Higher values reflect more variability. Data indicated as Belgium correspond to Flanders; GBR1 = England and GBR2 = Northern Ireland.

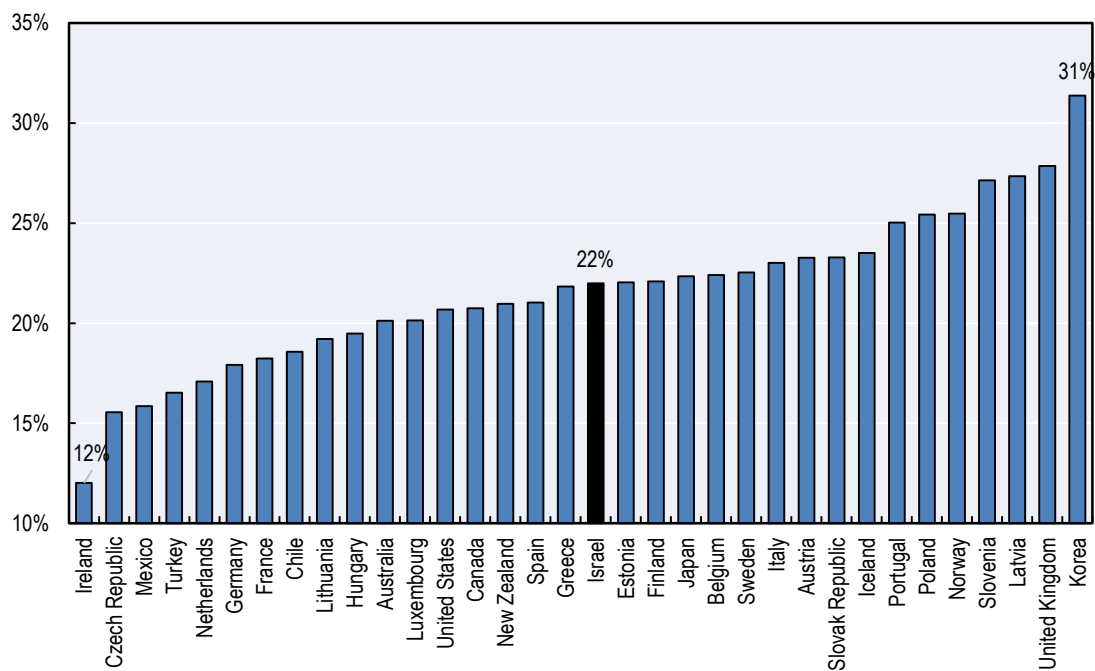
Source: OECD elaboration based on OECD (2018<sup>[27]</sup>), *OECD Economic Surveys: Israel 2018*, [https://dx.doi.org/10.1787/eco\\_surveys-isr-2018-en](https://dx.doi.org/10.1787/eco_surveys-isr-2018-en).

These disparities in educational outcomes are related to the segregated education system in Israel comprised of three different streams for Hebrew-speaking students (Haredi, state-religious and state) and one Arabic stream. This fragmented education system weakens skills formation of Haredi and Arabs (Wolff, 2017<sup>[25]</sup>; Blass and Shavit, 2017<sup>[28]</sup>). Since merging all these streams into a single curriculum is politically infeasible, improving the system will require more linkages between the different streams with the objective of raising the outcome of low achievers.

Although not all education reforms require more resources, it is hard to see how the government can raise the quality of education for students who are not currently meeting national and international norms without investing more resources in their education. In order to reduce inequalities in student academic performance, the government must either reallocate existing school budgets towards under-performing schools or increase central government funding of primary and secondary education. In 2015, the latest year for which comparative spending data are available, primary school education spending per student as a share of per capita GDP stood at 22%. As shown in Figure 2.4, this level of primary school spending is at approximately the median of OECD countries. However, as shown in Figure 2.5, upper secondary school spending per pupil in Israel relative to GDP per capita is significantly below the OECD median and average.

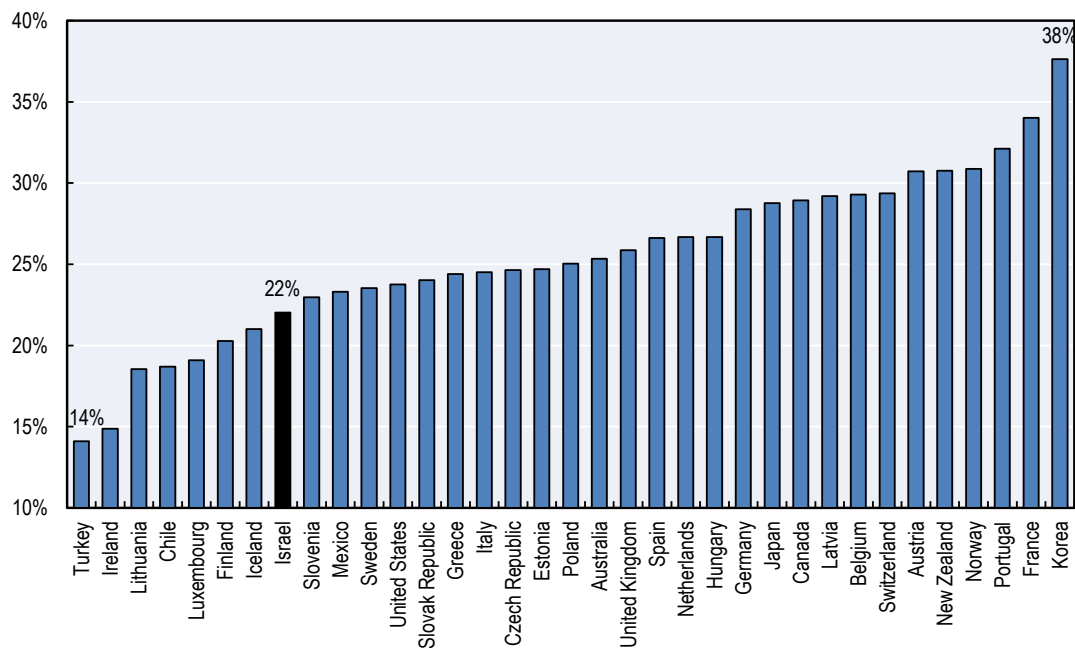


Figure 2.4. Primary school education spending per student as a share of GDP per capita OECD Countries, 2015



Source: OECD (2015<sub>[26]</sub>), Programme for International Student Assessment (PISA), 2015 Mathematics Assessment, OECD, Paris.

Figure 2.5. Upper secondary education spending per student as a share of GDP per capita, OECD, 2015



Source: OECD (2015<sub>[26]</sub>), Programme for International Student Assessment (PISA), 2015 Mathematics Assessment, OECD, Paris.

As described previously, schools are jointly financed by the central and local governments, with in most cases the largest portion of funding coming from a grant to local governments from the Ministry of Education. Box 2.5 provides an outline of how the amount of the MOE education grant to each local government is determined. Funding varies between schools according to the school stream and the local government's willingness and ability to provide schools with additional funding. Parents generally are required to pay some fees associated with the schooling of their children. The Ministry of Education also provides schools with categorical grants for teacher services and infrastructure, as well as support for transport services for school children, when needed. Schools in the Arab education stream tend to be underfunded relative to other schools, as they are often located in less affluent areas.

### Box 2.5. Funding of primary regular education in Israel

The budgeting of schools is determined by the sum of three main budgeting sources:

- A *basic allocation* (“the basic standard”) is the main component of the school budget. It is meant to guarantee the appropriate number of teacher work hours (i.e. annual cost of one teaching hour) necessary to cover the required curriculum. It is determined by three factors:
  1. a minimum standard per class
  2. number of students per class and
  3. the school’s Nurture Index (a measurement of the socioeconomic standing of the school population).
- *Dedicated “baskets”* based on the school’s student profile. These budgets are automatically transferred to the schools according to fixed formulas. They are usually dedicated funds, and are “earmarked” for specific purposes. The main baskets of this type are the:
  1. Nurture basket — intended to reduce education and academic gaps between population groups, based on socioeconomic criteria.
  2. Mainstreaming basket — for mainstreaming students with special needs in regular classes within regular schools. This basket, which is automatically allocated to official schools, can be considered part of the basic standard.
  3. Prayer time basket — specifically for Hebrew State-religious schools and schools with specialized Jewish studies. Resources are provided to fund teacher-supervised prayer every morning.
  4. Immigrant integration basket — intended for new immigrants and returning residents.
- *Other allocations* (“baskets”) There are additional discretionary baskets (such as those for road safety programs or life skills programs) based on a school’s inclusion in specific projects, or that stem from a recognition of a special need. Allocation is at the discretion of the Ministry of Education based on ministry guidelines. Discussion with local officials, including principles, and/or pressure from public entities can influence allocations.

Source: Blass, N. and H. Bleikh (2018<sup>[29]</sup>), “The determinants of the educational budget: Per student and per class”, in Weiss, A. (ed.), *State of the Nation Report-Society, Economic Policy in Israel*, Taub Center for Social Policy Studies in Israel.

As shown in Table 2.3, public education spending per student varies substantially across local governments. The differences across socio-economic clusters are striking. Education spending per student rises as one moves from lower to higher clusters. Spending is roughly two times higher in clusters 5 to 9 than in clusters 1 or 2. This pattern reflects in part the lack of *Arnona* resources in the lowest clusters.

*Arnona* revenue per student is 36 times higher in cluster 9 relative to revenue in cluster 1. The higher per student spending levels in higher clusters are also partially due to the fact that the per student Ministry of Education grant is higher in upper clusters than in lowest clusters. The ratio of the Ministry of Education grant to per student education spending decreases from 94% in cluster 1 to 78% in cluster 4.

**Table 2.3. Per student education spending, grant revenue, and property tax revenue**

Kindergarten, Primary School, and Secondary School Students, 2016

Socio-economic cluster	Education spending	Ministry of Education grant	Residential Arnona revenue	Non-residential Arnona revenue	Balance grant
1	6 805	6 379	334	293	1 603
2	7 070	5 931	1 631	753	3 683
3	8 232	6 459	2 461	1 482	4 379
4	8 955	7 003	3 577	3 898	4 184
5	12 925	9 418	6 088	6 238	5 474
6	14 603	9 863	5 436	18 957	4 532
7	13 254	9 466	6 102	8 955	2 476
8	11 810	8 328	8 206	6 298	1 452
9	12 813	9 290	12 191	3 342	358
10	10 841	5 454	27 255	5 930	0
<b>Average</b>	<b>9 173</b>	<b>6 521</b>	<b>4 770</b>	<b>6 163</b>	<b>1 610</b>

Source: OECD calculations using data from the Central Bureau of Statistics.

The ratio is approximately constant for clusters 5 to 8 at around 70%. It is striking that the per student MOE grant is 50% higher in cluster 9 than in cluster 1. Blass and Bleikh (2018<sup>[29]</sup>) describe the incredible complexity of the grant allocation formulas and describe in some detail how some policy decisions may partially counteract the goal of providing larger per student grants to lower socio-economic clusters.

In all clusters, per student education spending is higher than the Ministry of Education grant. These gaps must be filled from own revenues or from other grant revenues, for example from the Balance Grant. In cluster 1, almost all *Arnona* revenue would be needed to fill the gap between the MOE education grant and education spending. However, in higher clusters, although the size of the nominal per student gap is larger, the gaps can be filled by an increasingly smaller share of *Arnona* revenues.

Despite the relatively low levels of *Arnona* revenue per student in the lowest clusters, it is striking that the balancing grant per student are below NIS 4 000 in the two lowest clusters, and at NIS 5 474, highest in cluster 5.

Table 2.4 highlights the ethnic/religious dimension of the education spending issue. Per student spending was 12% above average in the (predominantly) Jewish local authorities, while predominantly Arabs local authorities spent 36% less than average, and mixed/other local authorities 18% below average. The Ministry of Education grant finances two-thirds of the education expense in the Jewish or the mixed/other sectors, but more than 88% in the Arab sector. Nevertheless, the average grant per student in the Jewish sector is above the average grant in the Arab sector by 8%.

The pattern of education spending and MOE grant per student varies across socio-economic cluster and by ethnic/religious classification. In the Jewish sector, the largest per student grants go to local jurisdictions in clusters 5 to 9, and the average per student grants in clusters 9 and 10 and nearly three times larger than the average grants in clusters 1 and 2. The distribution of the Ministry of Education grant differs

completely in the Arab sector. 80% of Arabs local authorities are located in the three lowest clusters. They receive relatively high per student grants, although these grants are lower than the average per student grants in predominantly Jewish clusters 5 through 9. Students in the three highest Israeli-Arab clusters (5 through 7) receive lower average grants than students in the same clusters who live in Jewish or mixed/other jurisdictions.

**Table 2.4. Education spending and Ministry of Education grant per student by religious/ethnic classification**

Kindergarten, Primary School, and Secondary School Students, 2016

Socio-economic cluster	Predominantly Jewish			Predominantly Arab			Mixed/Other		
	Number of jurisdictions	Education spending	MOE grant	Number of jurisdictions	Education spending	MOE grant	Number of jurisdictions	Education spending	MOE grant
1	2	2 164	1 713	9	7 837	7 416	0	-	-
2	7	5 547	4 189	34	8 153	6 643	1	5 684	3 387
3	9	10 603	6 906	26	7 508	6 370	1	5 715	4 728
4	9	9 107	6 718	9	8 645	7 110	1	10 387	8 614
5	24	12 861	9 536	4	8 763	7 131	3	10 230	7 701
6	26	15 297	10 270	2	6 085	3 751	1	13 585	11 515
7	36	13 505	9 645	1	4 218	3 019	0	-	-
8	40	11 848	8 378	0	-	-	0	-	-
9	8	12 813	9 290	0	-	-	0	-	-
10	2	10 841	5 454	0	-	-	0	-	-
<b>Total/average</b>	<b>163</b>	<b>10 266</b>	<b>7 038</b>	<b>85</b>	<b>7 371</b>	<b>6 509</b>	<b>7</b>	<b>6 235</b>	<b>4 026</b>

Note: A local government is characterised as Jewish (Arab) if 70% or more of its 2016 population is Jewish (Arab) as classified by the Israeli Central Bureau of Statistics.

Source: OECD calculations using data from the Central Bureau of Statistics.

The data in Tables 2.3 and 2.4 suggest that substantial inequities exist in the funding of education in Israel. The current allocation of grants does not adequately compensate for the unequal distribution of *Arnona* revenue, with the result that per student support for education lags in many Israeli communities, especially Arab Israeli communities and all communities with poor socio-economic status. These data support the conclusion of the OECD (2018<sup>[27]</sup>) *Economic Survey of Israel* that “disadvantaged schools need much greater funding” (p. 47).

### ***The funding of social welfare***

More than 75% of the budget of the Ministry of Labour and Social Welfare is earmarked for social services in local authorities. Local social welfare services are jointly funded by the central government through the Ministry of Labour and Social Welfare and by the local authorities. The local contributions come primarily in the form of a 25% matching rate to the social welfare grant. Social service activities include services provided directly by local authority-employed social workers and by services outsourced to various agencies. Many social welfare services are provided to clients in their homes or in local social service agency facilities, although some services, such as long-term care, are provided elsewhere.

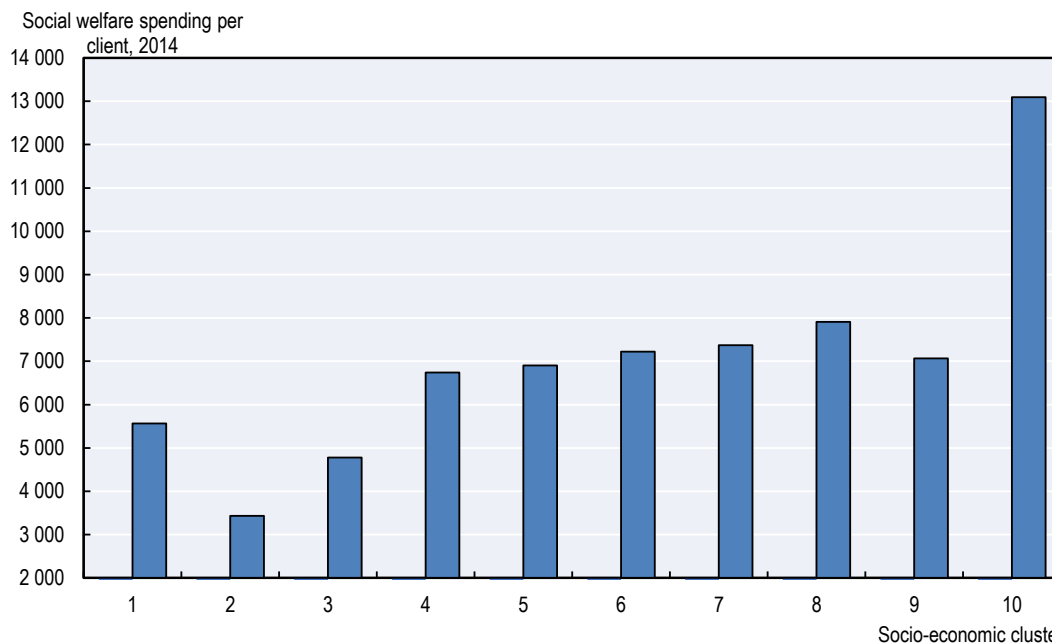
The Ministry of Labour and Social Welfare grants are allocated to local authorities using a set of formulas related to various social services provided and financed by the Ministry. Allocations depend in part on eligibility conditions for those in need. Based on these formulas, the Ministry determines the budget

earmarked to each local authority at the start of each budget year. This initial budget is re-examined over the course of the year, in accordance with new needs that may have arisen, and the local authority's willingness to provide its share of the funding. Toward the end of the year, the Ministry transfers remaining budget sums (some of which come from localities that did not utilize the sums that the Ministry had earmarked for them) to localities in need of additional funds and that are able to match the additional levels of spending. The Ministry also transfers to the localities additional budgets to fund new social welfare programs that were started during the year. In addition, local authorities are authorised to expand the social services provided within their area of jurisdiction through self-funding. These local funds may come from local resources such as *Arnona* revenue or from external non-governmental funding, such as from non-profit foundations.

While social welfare spending as a percentage of total budgetary expenditure tends to decline as locality socio-economic status rises, the data in Figure 2.6 shows that total social welfare spending per social service client rises as socio-economic status rises. The average social welfare expenditure per client in local authorities belonging to clusters 1-3 (most of the Arab Israeli authorities are concentrated in these lower socioeconomic clusters) is lower than the average expenditure in localities belonging to clusters 4-10. These disparities are even more marked when one compares the budgets of affluent and poor local authorities, and of Jewish and Arab Israeli localities (Gal, Shavit and Bleikh, 2017<sup>[30]</sup>). These spending gaps are related to differences in the types of client populations within the various communities, variations in local authority's service provision patterns, and the willingness of stronger localities to increase social welfare spending beyond the allocations provided by the Ministry of Labour and Social Welfare. The spending disparities also appear to be rooted in the weaker localities' inability to commit to funding their share of out-of-home services for their residents, and in a shortage of out-of-home institutions serving needy Arab Israelis. These funding gaps worsen already-existing inequalities in Israeli society and harm the country's weakest population segments.

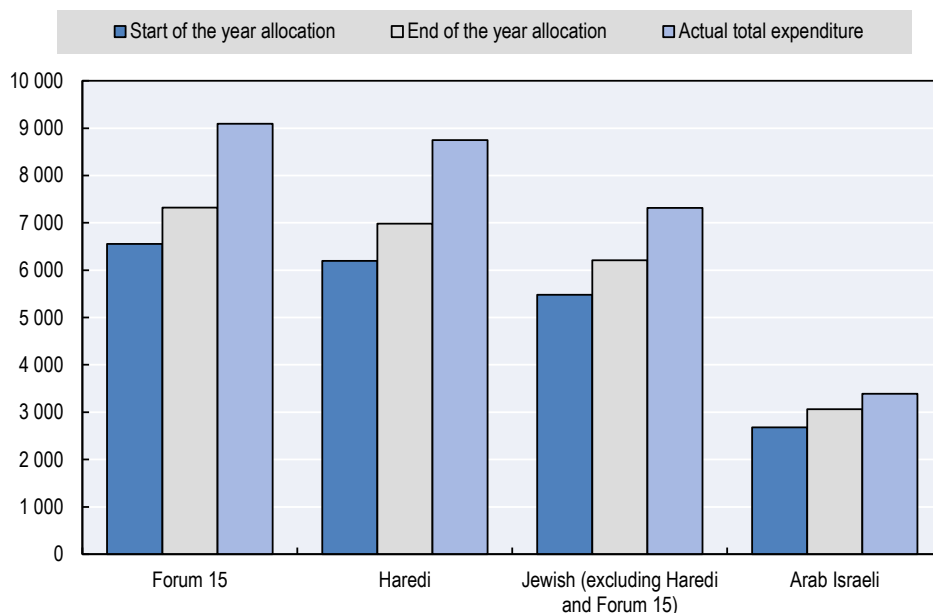
Figure 2.7 shows that after accounting for the financial contributions to social welfare service from local authorities, the funding gaps per client between different groups of jurisdictions grow even larger than the gaps observed in grant allocations. For example, the Jewish local authorities' total per-client expenditure was NIS 7 318 in 3024— 2.2 times the Arab Israeli authorities' average expenditure. We have seen that the Haredi local authorities exhibit a relatively high degree of additional municipal expenditure given their socioeconomic standing; their total per-client expenditure amounts to NIS 8 750 — NIS 2 500 more than the total average per-client expenditure for all local authorities. However, this disparity spending per client between the Haredi local authorities and the other groups begins with their higher grant allocation from the Ministry of Labour and Social Welfare at the start of the year.

**Figure 2.6. Social welfare spending per client by socio-economic cluster, 2014**



Source: Adapted from Figure 4 in Gal, J., M. Shavit and H. Bleikh (2017<sup>[30]</sup>), "Social service budgeting in Israeli local authorities", in Weiss, A. (ed.), *State of the Nation Report-Society, Economic Policy in Israel*, Taub Center for Social Policy Studies in Israel.

**Figure 2.7. Per client budgets and actual social welfare spending per client by locality grouping, 2014**



Note: Forum 15 is group of 15 local governments that do not receive government development or balance grants. Haredi jurisdictions are those with a majority of Haredi Jewish residents.

Source: Adapted from Figure 15 in Gal, J., M. Shavit and H. Bleikh (2017<sup>[30]</sup>), "Social service budgeting in Israeli local authorities", in Weiss, A. (ed.), *State of the Nation Report-Society, Economic Policy in Israel*, Taub Center for Social Policy Studies in Israel.

### ***The role of grants in reducing local government fiscal disparities***

Large differences exist across local governments in their per capita revenues from both the residential and non-residential *Arnona*. As illustrated in Figure 2.1, average per capita revenues differ among socio-economic clusters. Average per capita *Arnona* revenues are lowest in jurisdictions in cluster 1 and increase steadily for local governments in higher clusters. These differences reflect differences across jurisdictions in taxable area, in tax rates, and in the administration of the tax. The square meters of developed property and land used for various purposes defines the tax base of each jurisdiction. Although *Arnona* tax rates are set by the central government, actual rates by type of property can vary because local governments can define sub-classifications of property types and apply different rates to various sub-classifications. Local governments can also request permission from the Ministry of Finance to change rates. Local governments also have some discretion in determining how the *Arnona* is administered. They can vary the level of discounts granted certain taxpayers, and by their actions and inactions influence their *Arnona* collection rates.

In nearly all countries, higher-level governments respond to differences in the fiscal conditions of their local governments by allocating grants-in-aid, usually in a manner designed to reduce fiscal differences. A major concern in the design of intergovernmental transfer systems is to avoid the creation of incentives for inefficient behaviour on the part of local governments. For example, providing larger grants to local governments with low levels of *Arnona* revenue would provide those governments an incentive to issue more discounts and reduce efforts to collect *Arnona* bills. To prevent these responses and to avoid creating *soft budget constraints* for local governments, most equalising grant programs base grant allocations on the *revenue (or tax) capacity* of local governments. Changes in local government tax behaviours or efforts will affect tax revenues but will have no impact on its tax capacity. As described in Box 1.11 (Chapter 1), the allocation of balance grants depends in part on a sophisticated tax capacity measure known as *potential revenues*.

A commonly used and straightforward measure of tax capacity is the *representative tax system* (Chernick, 1998<sup>[31]</sup>). As applied to the *Arnona* it multiplies the per capita tax base for each type of property in each local government, e.g., the total square meters of residential property per capita, by the average tax rate applied to that type of property across all local governments. The *Arnona* tax capacity of each local government is then calculated by summing across all types of real property.

Observing the distribution of per capita tax capacities across local governments provide one measure of the degree of inequality that would exist across local jurisdictions if there were no transfers from the central government. For a complete measure of the *fiscal disparities* among local governments one needs to also consider variations across local governments in their *expenditure needs* (Boadway and Shah, 2007<sup>[32]</sup>). As explained in Box 1.11 (Chapter 1), this concept takes the form of *normative expenses* in the calculation of general balancing grants. As the development of a measure of expenditure needs is beyond the scope of this report, here we explore several measures of tax capacity inequality across local governments, and then assess the degree to which measured inequality is reduced by Israel's current system of grants to local governments.

Table 2.5 displays several inequality measures that are applied to residential, non-residential, and total *Arnona* tax capacity and tax revenue, all measured in per capita terms. The first measure is the *coefficient of variation*, which is simply the standard deviation of the distribution of capacity or revenue divided by the average (or mean) value. The second measure is the *range*, which is the difference between the minimum and maximum values, and the third measure of inequality is the *Gini coefficient*. A Gini coefficient of zero represents perfect equality, while a value of one represents maximum inequality.

**Table 2.5. Per capita *Arnona* tax capacity and actual revenue, 2016**

## Measures of Fiscal Disparities Among Israeli Local Government

	Residential <i>Arnona</i> tax capacity	Residential <i>Arnona</i> revenue	Non-residential <i>Arnona</i> tax capacity	Non-residential <i>Arnona</i> revenue	Total <i>Arnona</i> tax capacity	Total <i>Arnona</i> revenue
Average	1 676	1 135	1 618	1 076	3 294	2 211
Standard deviation	620	781	2 658	1 297	2 807	1 719
Coefficient of variation	0.37	0.69	1.64	1.21	0.85	0.78
Minimum	0	0	21	0	73	22
Maximum	6 537	6 685	28 007	10 073	29 824	13 527
Gini coefficient	0.166	0.329	0.577	0.550	0.333	0.385

Note: For each type of property, tax capacity in jurisdiction *i* is measured by the average rate across all local governments for that type of property times the total taxable area in jurisdiction *i*. Non-residential tax capacity is the sum of capacity for each type of non-residential property. Source: OECD calculations based on data from the Central Bureau of Statistics.

As would be expected, the inequality in residential tax capacity is relatively small. While home values vary substantially across the country, the variation in housing consumption, measured in housing area, is much smaller. The Gini coefficient is quite low and the coefficient of variation is modest. Inequalities in non-residential tax capacity are much greater, however. All three measures of inequality show that there is a high degree of variation across local governments in their capacity to raise property tax revenue. Adding together residential and non-residential capacity reduces the measures of inequality observed for the non-residential *Arnona*. The coefficient of variation at 0.85 is quite high, as is the Gini coefficient, at 0.33.

Comparing the distribution of actual revenue to the distribution of tax capacity, one finds that inequalities are substantially larger for the residential *Arnona*, while they are smaller for the non-residential *Arnona*. For the average local government in clusters 1 through 7, actual residential revenues are substantially lower than residential capacity. This probably reflects a combination of a couple factors. As illustrated in Table 1.7, discounts relative to gross charges are higher in the low-numbered clusters, and the collection rates are also substantially lower. These factors lead to greater variation in actual residential *Arnona* per capita revenues relative to variations in tax capacity. For the non-residential *Arnona*, the differences between capacity and actual revenue are much smaller. While average non-residential revenues are lower than capacity in the bottom eight clusters, non-residential revenues are larger than capacity in the top two clusters, suggesting that clusters with the highest socio-economic ranking are utilizing above-average tax rates. Differences in the distribution of total *Arnona* capacity and total *Arnona* revenue are muted. The inequality measures provide a mixed message. Inequalities in tax capacity are larger than inequalities in actual revenues when measured by the coefficient of variation and the range, but they are smaller than inequalities in actual revenue when the Gini coefficient is used. This difference may be explained by the fact that the Gini coefficient is less influenced by the extreme values of a distribution than is the coefficient of variation.

To determine whether the spatial pattern of growth and development in Israel has increased or decreased fiscal disparities over time, we calculated local government fiscal capacity related to the *Arnona* using data for 2009. We then compared the coefficients of variation and the Gini coefficient for residential and non-residential *Arnona* for 2009 and 2016. The data show that while the distribution of the residential *Arnona* capacity remained essentially unchanged, the inequalities in non-residential tax capacity were substantially reduced. The coefficient of variation went from 1.98 to 1.64, and the Gini coefficient dropped from 0.690 to 0.577. Thus, although the disparities in non-residential tax capacity remain large, the direction of change has been towards equalisation. It is important to emphasize that rapid economic development in the past



few years in the central part of Israel may have a substantial impact on both residential and non-residential fiscal disparities within Israel.

### Box 2.6. The effectiveness of grants in reducing fiscal disparities among sub-national governments

More important than the size of equalising grants is their equalising performance (or “effectiveness”) in reducing fiscal disparities among subnational governments. Using two measures of fiscal disparities—Gini coefficients and the ratio of highest to lowest tax capacity—an OECD report explores the impacts of equalisation grants on fiscal disparities among subnational governments (OECD, 2013<sup>[33]</sup>). The report finds that equalisation grants in some countries, for example, Australia, Italy, Norway, and Sweden, were particularly effective in reducing fiscal disparities. On the other hand, equalisation grants in Germany and Switzerland had smaller impacts on the reduction of fiscal disparities.

As equalising grants systems are often composed of various grants of different sizes and allocated using different formulas, understanding the overall equalising performance of the grant system requires analysing the marginal contribution to equalisation of each component grant, and diagnosing how individual grants interact. This can be accomplished using appropriate statistical indexes to measure inequality across local governments. Overall equalising performance results from the combination, for each of the equalising grants, of a “size component”, accounting for the magnitude of each grant, and of a “marginal equalising component,” which measures the effect (if any) on an inequality index of the distribution of each grant. See Gilbert and Guengant (2004<sup>[34]</sup>; 2005<sup>[35]</sup>), for a detailed description of the methodology and an application to the highly complex equalising grant system in France.

Sources: OECD (2013<sup>[33]</sup>), *Fiscal Federalism 2014: Making Decentralisation Work*, <https://dx.doi.org/10.1787/9789264204577-en>; Gilbert, G. and A. Guengant (2005<sup>[35]</sup>), “Evaluation de la performance péréquatrice des concours financiers de l’Etat aux communes”, *Economie et Statistique* 373, pp. 81-108; Gilbert, G. and A. Guengant (2004<sup>[34]</sup>), “The equalizing performance of the central government grants to local authorities; the case of France”, *Papers and Proceedings*, pp. 192-202.

To assess the extent to which the Israeli system of intergovernmental grants has reduced the underlying fiscal disparities among local governments caused by differences in *Arnona* tax capacity, we recalculated our inequality measures after accounting for the distribution of grants. For easy reference, the descriptive statistics for total *Arnona* tax capacity are repeated in the first column of Table 2.6. The second column displays descriptive statistics for the sum of *Arnona* capacity and the per capita balance grant. As the balance grant was explicitly designed to reduce fiscal disparities among local governments, it is not surprising that the variation in resources is more equally distributed after receipt of the balance grant. The coefficient of variation declines from 0.85 to 0.68, and the Gini coefficient falls from 0.33 to 0.255. The final column presents the results from adding *Arnona* tax capacity and all government grants going to the regular budget. Both the coefficient of variation and the Gini coefficient are reduced by adding other central government grants. It is important to note that the balancing grant is much more equalising than the other grants going to local governments, even though, as shown in Figure 1.9, the general balancing grant made up only 15% of the total government grants going to the regular budgets of local governments. The conclusion is that aside from the very small, equalisation fund grants, the largest grant program, the education grant, has only a small impact on reducing fiscal disparities among local governments.

**Table 2.6. The impact of grants on fiscal disparities among Israeli local governments, 2016**

	Total Amona tax capacity	Tax capacity and balance grants	Tax capacity and all grants
Average	3 294	4 130	7 134
Standard deviation	2 807	2 797	3 953
Coefficient of variation	0.85	0.68	0.55
Minimum	73	762	2 977
Maximum	29 824	31 566	37 272
Gini coefficient	0.333	0.255	0.221

Note: See notes for Table 2.5.

Source: OECD calculations based on data from the Central Bureau of Statistics.

The data in the final column of Table 2.6 demonstrate that whereas government grants have been successful in reducing fiscal disparities that exist among local governments, there remain substantial differences across local government in their capacity to provide the public services for which they are responsible. These differences in resources will continue to translate into differences in the education, the skills, and the opportunities available to Israelis depending on where they live. Moreover, these data are likely to understate the true magnitude of fiscal disparities among local governments because they focus only on resource differences and not on differences in the expenditure needs and the costs of delivering public services in different communities.

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# 3 Policy recommendations

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Chapter 3 offers guidance on how to improve and reform the current system of local government finance in Israel. It includes a set of 13 policy recommendations designed to improve the efficiency and equity of the system. The first set of eight policy recommendations are designed to improve the existing *Arnona* system. Priority is given to changes that are actionable and could be adopted and implemented relatively quickly. The final five policy recommendations represent a blueprint for a more substantial reform of the system of local government finance in Israel. The centre piece of this reform is the establishment of a value-based system of local property taxation applied to both residential and non-residential property.

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## Introduction

On the basis of the review and analysis of the system of local government finance in Israel presented in the first two chapters of this report, chapter 3 suggests a number of policy recommendations. On the whole, the recommendations are motivated by a desire to improve local government finance in Israel along a number of important dimensions:

- Increasing economic efficiency by reducing distortions created by the *Arnona* system.
- Increasing the horizontal and vertical equity of the *Arnona* both within and among local governments.
- Simplifying and increasing the transparency of the system of local government finance.
- Enhancing the effectiveness of the public services provided by local governments.
- Providing local governments with increased autonomy over their fiscal affairs while also making progress on national goals of improving education, reducing poverty, increasing social welfare, and enhancing environmental quality throughout Israel.

The 13 OECD policy recommendations that follow are divided into two distinct sections. The first eight policy recommendations are designed **to improve the existing *Arnona* system**. Priority is given to changes in the *Arnona* system that are actionable and could be adopted and implemented relatively quickly. Once they are implemented, they should begin to produce results in terms of the criteria of an effective system of local public finance.

The final five policy recommendations represent **a blueprint for reforming more radically the system of local government finance in Israel**. The centre piece of this reform is the establishment of a value-based system of local property taxation applied to both residential and non-residential property.

## Policy recommendations for *improving the Arnona*

Our first policy recommendation calls for the reduction of non-residential *Arnona* rates as a way of reducing the existing disparity between residential and non-residential rates. As the reduction of *Arnona* rates will reduce the revenue available to local governments, the second and third policy recommendations address the sources of replacement revenues. The second recommendation suggests new sources of local government own-source revenue and the third recommendation proposes increases in central government grant to finance delegated services. The next five recommendations address specific changes to the *Arnona* that address explicitly some of the shortcomings of the current system.

### ***Policy recommendation 1:***

#### ***Reduce the large disparity between non-residential and residential Arnona rates by reducing non-residential rates relative residential rates***

As illustrated by Figure 1.17, compared to most OECD countries, Israel relies very heavily on the property tax to finance its local governments. In addition, as shown in Table 1.4, average non-residential *Arnona* rates are in many cases two or three times higher than average *Arnona* rates on residential property. While it is appropriate that the *Arnona* play a central role in local government finance, its high rates, especially on non-residential property, distort economic development decisions and exacerbate problems of horizontal and vertical inequity. Although hard data are not available, it appears that the *Arnona* revenue raised on non-residential property is substantially in excess of the cost of public services delivered to those properties. The potential to collect a large fiscal surplus from non-residential property appears to be influencing the economic development strategies of local governments. Some governments are constructing large commercial-industrial parks and designating large portions of available land for

exclusive non-residential uses. In cases where available land for commercial-industrial development exceeds potential demand, land may remain vacant for long periods. The residential-non-residential rate differential may also serve to discourage some local governments from developing land for new residential development.

The government should reduce the ratio of non-residential rates to residential rates by mandating reductions in non-residential *Arnona* rates. As the reduction of *Arnona* rates will reduce the tax revenue available to local governments, this policy recommendation is only feasible if it is combined with policies to replace the lost *Arnona* revenues. Policy recommendation 2 and 3 propose alternative sources of own revenue and increases in government grants to local governments as replacements for reduced *Arnona* revenues from non-residential property.

***Policy recommendation 2:***

***Develop alternative sources of local government revenue, through taxation, user charges and income from assets***

According to OECD Revenue Statistics, more than 80% of local government tax revenue in Israel comes from the property tax, a percentage that is nearly twice the OECD average (Figure 1.16). One way to help finance a reduction in non-residential *Arnona* rates would be for local governments (with permission from the central government) to enact other local taxes to diversify their portfolio of taxes. Although they are unlikely to generate a substantial amount of revenue in most jurisdictions, it is appropriate for local governments to levy tourist taxes, such as taxes on hotel accommodations or short-term apartment rentals, e.g. Airbnb, or taxes on restaurant meals (Box 3.1).

### Box 3.1. Tourism taxes, fees and charges in the OECD and EU

Tourism taxes, fees and charges, often referred to as occupancy, bed night, room, accommodation or transient visitor taxes, are quite common in the OECD and European Union. Tourism taxes focus on tourism or accommodation providers (hotel, B&B, campsites, vacation rentals, etc.). They are typically levied on short-term stays in paid accommodation.

According to OECD Tourism Trends and Policies (2014[1]), there has been a general increase in the number and scope of tourism-related taxes, fees, charges over the last 10 to 15 years. In 2017, tourism taxes were levied by more than two-thirds of EU Member States, in about one-half of the states in the United States, Canada, Mexico and Switzerland. European Union and OECD countries not levying a tourism tax include the UK, Ireland, Denmark, Sweden, Finland, Estonia, Latvia, Luxembourg, Iceland, Chile and Israel.

Greece introduced an Overnight Stay Tax in January 2018 to help reduce public debt. Japan introduced a "sayonara tax," in January 2019 paid by international visitors as they leave the country, which will be used to enhance Japan's tourism infrastructure before the 2020 Summer Olympics in Tokyo. Some big Japanese cities (Tokyo, Kyoto and Osaka) had already set up lodging taxes. New Zealand introduced an International Visitor Conservation and Tourism Levy (IVL) on 1 July. Collected through visa fees and via the new Electronic Travel Authority, the IVL will support conservation and the development of tourism infrastructure. Scotland has recently introduced legislation allowing municipal governments to levy a tourist tax – this follows on from an extensive consultation exercise in late 2018/early 2019. Additional consultation is underway and the legislation is not expected until 2020-21.

The overwhelming majority of taxes specific to hotels and accommodation facilities are administered at the subnational and primarily the municipal level, with only few countries identifying examples at the national level such as Greece, Malta. Norway decided against a national tourism tax in 2017 but has allowed municipalities to introduce local schemes should they wish. The tourist tax receipts can be also shared between different bodies including cities, counties, the national tourist board, and the Red Cross (Croatia) or regional and municipal tourist bodies (Spain).

In general, taxes may be levied on a number of bases, such as "per person, per night", "per room, per night", or as a proportion of the room cost. Tax rates applied also vary widely. They can be set at national level but rates may vary from one city to another, when municipal discretion over the rates is applied. There can be differentiated rates depending on the location (for example between historical city centre vs suburbs e.g. Amsterdam), quality ratings and cost of accommodation, the period of the year (high versus low seasons), or the payer (foreigners/external versus local residents e.g. in Amsterdam); exemptions or reduced rates might also exist for young people or business travellers (e.g. Berlin and Hamburg).

Tax collection mechanisms also vary across countries. Tourism taxes may be included in the price paid in advance for accommodation, or may be payable in person; they may be paid by the accommodation owner directly, or through intermediary platforms like AirBnB.

The use of tourist tax revenues varies from one country to another, or even from one city to another. They can be dedicated or hypothecated to support the tourism sector (local tourist boards, tourism promotion activities, construction and maintenance of tourism infrastructure and amenities, workforce training in the tourism sector), to finance environmental protection and conservation (e.g. the Great Barrier Reef Marine Park Environmental Management Charge [EMC]), historical and cultural preservation and restoration, and improve urban infrastructure, including public transportation.

Although generally small (tourism taxes typically represent a small proportion of the overall cost of accommodation), tourism taxes can play an important role in complementing local government



revenues. In addition, tourists have typically a greater willingness to pay than residents (because of preferences and higher income), and taxation can price in any negative externalities. In countries where tourism price competitiveness is already very high, the impact is, in general, negligible on foreigners.

Sources: European Commission (2017<sup>[1]</sup>), *The Impact of Taxes on the Competitiveness of European Tourism*; Government of Scotland/UK (2018<sup>[2]</sup>), *Transient Visitor Taxes in Scotland: Supporting a National Discussion - A Scottish Government Discussion Document*; Ollivaud, P. and P. Haxton (2018<sup>[3]</sup>), "Making the most of tourism in Indonesia to promote sustainable regional development", Working Paper of the Economic Department; OECD (2014<sup>[4]</sup>), "Taxation and tourism", <https://doi.org/10.1787/tour-2014-6-en>; The European Tourism Association (ETOA).

The government could also consider giving local governments the possibility to raise taxes that are related to the provision of local public services. In OECD countries, most common local own-source taxes are taxes related to the provision of local public services such as waste collection tax, cleaning tax, street lighting tax, etc.

Taxes related to local vehicular traffic, such as parking taxes or taxes on ride-sharing service, would also be appropriate. These taxes have a strong link with local transportation infrastructure provided by local governments, in the maintenance of local roads. Therefore, if the revenue from these taxes is used to finance roads and other transportation services, it can match payment for services to the benefit from the service.

Local governments should also consider implementing license taxes related to specific local activities, such as advertising, gambling, entertainment, personal services, markets, or real estate transactions. This type of tax is used by local governments in a number of OECD countries. Tax on advertising in particular is widely used at the local level both in developed and developing countries. Although expected revenues may be limited, such tax may be seen as desirable with many respects. First, it is easy to implement locally. It is unlikely subject to local tax competition as the location of advertisements within the local space is mainly linked with commercial requirements. It is poorly subject to business cycle. It is also directly linked to the control of local public (and private) space which is mainly under the responsibility of local governments. As a result, the setting of the tax rate could be left to local governments without large efficiency costs. In the same vein, some countries (France for example) levy taxes or tariffs on local facilities of network industries (power stations, dams, windmills telecom antennas and repartitors....). These taxes /tariffs are often set by the central government and the proceeds are shared with local governments (it is not a piggy-tax). Finally, a local surcharge on the tax on real estate transactions could be also considered: while such tax may provide additional revenues to municipalities (despite its sensitivity to business cycles), it could be seen as a way to introduce a tax based on (real) property values at the local level, and therefore represent a step further in the perspective of the Arnona reform.

Figure 1.12 shows that compared with subnational government in OECD countries, local governments in Israel raise very little revenue from user charges: user charges and fees accounted for 4.5% of local government revenue in 2016 well below the OECD average of 14.9% in 2016. Although the potential revenue that could be raised from user charges and fees may be limited, the government should explore the revenue potential of establishing new fees, related to the provision of local public services, or consider raising rates on existing fees. Although provisions should be made for residents with low incomes, taxes or user fees on specific municipal services such as waste collection, the use of recreational facilities, or street lighting, may be appropriate.

Finally, local governments in Israel derived 1.3% of their total revenue from their physical and financial assets. These revenues come mainly from the rent and sales of local assets (land and buildings) as well as from dividends paid by water companies. It is less than in the OECD where on average, subnational governments raised 2% of their revenues from these sources in 2016. Although many municipalities in Israel have relatively few assets, at least some local governments could explore the possibility of raising more revenue related to their ownership of property assets. There are major obstacles to this development

related to the fact that many municipalities in Israel have relatively few own assets, which limits the potential of this option.

***Policy recommendation 3:  
Reform the central government fiscal transfers in support of the major delegated functions-education and social welfare***

If, as proposed in recommendation 1, non-residential Arnona rates are reduced, the grants for the delegated functions of education and social welfare would need to be increased to compensate for the lost Arnona revenues, some of which is used by local governments to finance public education and social welfare activities carried out by local governments.

Without increases in ministry grants, spending per student and per social welfare client would fall substantially in many local governments. If alternative sources of local government revenue are implemented (see recommendation 2), then the portion of the ministry grants for education and social welfare that were intended to replace Arnona revenues (as recommended above) could be reduced.

The matching requirements attached to the grants for education and social services should be reconsidered to better reflect wealth differentials across municipalities. Israel could establish variable matching rates based on municipal tax capacity instead of the current “fixed rate” system.

The analysis presented in this report support the conclusion of the OECD’s (2018<sup>[5]</sup>) *Economic Survey of Israel* that “disadvantaged schools need much greater funding”. More generally, it suggests that the current allocation of grants do not adequately compensate for the unequal distribution of *Arnona* revenue. While the ministry grants for delegated functions have succeeded in reducing inequalities among local governments, there remain substantial differences across local authorities in their capacity to provide the public services for which they are responsible. With this in mind, it is important that the allocation of education and social welfare grants be reformed so that a larger portion of the total grant amount goes towards municipalities in the lowest socio-economic clusters.

Larger ministry grants for education and social welfare will require additional government revenues. These revenues will need to come from reductions in other government programs, from raising rates on existing taxes, or for the establishment of new taxes. It is well beyond the scope of this report to recommend a specific finance mechanism. It is however worth pointing out that businesses will be the primary beneficiaries of the reduction in non-residential Arnona rates. It may thus be appropriate to consider financing larger government grants by implementing increases in businesses taxes.

***Policy recommendation 4:  
Standardise the classification of types of property across the country and reduce the number of sub-classification categories***

*Arnona* rates vary by the type (and use) of property. While the government has defined 13 major “classes” of property, each local authority can (with approval of Ministries of Finance and Interior) establish its own set of subclasses within the major classes established by the central government. There are currently thousands of different sub-classes, with large differences in classification systems across local governments. The myriad of subclasses contributes to economic inefficiency, and to horizontal and vertical inequities in the *Arnona*. The existence of these subclasses of property increases the complexity of the *Arnona* system and reduces its transparency. The government should take steps to reduce the number of subclasses and standardize the system of classification across all local governments. Although a standardized classification system would have advantages in terms of increased efficiency and equity, and lower administrative costs, it would come the cost of further reducing the fiscal autonomy of local governments.

In effect, allowing local governments to have control over sub-classification was a *backdoor* way of providing them some additional control over local rates. It would be preferable to standardize the classification system but give local governments some additional latitude in setting their own *Arnona* rates.

***Policy recommendation 5:***

***The central government should establish and enforce a uniform system for measuring taxable area for purposes of implementing the Arnona (pending more comprehensive reform –see recommendations 9 and 10)***

The *Arnona* is an area-based system, with tax liabilities depending on the square meters of property used. Local governments however have been free to determine their own method for calculating areas. Some use internal dimensions, while others use external dimensions. There is also no consistent treatment of various real estate features such as common areas, parking area, and porches. Evidence suggests that different systems for calculating area can result in differences of up to 30% in calculated area.

It is difficult to find an economic justification for allowing local discretion in the methodology used to measure the size of the tax base. A national uniform method should be adopted by the central government. To enhance the transparency of the *Arnona* system, the government should also consider making publicly available the size (in square meters) of each property (possibly on the website of the Ministry of Interior). In some countries using value-based property tax systems, the assessed value of each property is public information, often available on the websites of local jurisdictions.

While the standardization of the method used to calculate taxable area might be seen as another reduction in local fiscal autonomy, as argued in policy recommendation 4, local governments can be compensated by allowing them more discretion in the setting of *Arnona* tax rates.

***Policy recommendation 6:***

***Addressing the problems created by the current system of Arnona exemptions and discounts***

*Exemptions provided to residential Arnona taxpayers*

Because it is extremely difficult to make an area-based property tax progressive, there is a broad consensus in Israel that the residential *Arnona* is regressive. In an attempt to reduce the burden of the property tax on certain categories of individuals, such as the elderly, persons with mental or physical disabilities, students, soldiers performing compulsory national service, and families with low incomes, the Ministry of the Interior establishes criteria for eligibility for *Arnona* discounts. Although local governments retain some flexibility in determining the percentage level of discounts, they are required to provide *Arnona* discounts to eligible taxpayers.

While the granting of exemptions, reliefs and discounts to needy individuals reduces economic hardships created by the *Arnona* and improve the vertical equity of the tax, it also has unintended serious side-effects.

First, by reducing *Arnona* revenue from discount-eligible households, local governments have an incentive to discourage potential new residents who may be eligible for *Arnona* discounts. This discouragement may take the form of restrictive housing or land use policies. The granting of discounts increases the probability that the costs of providing services to these new residents will exceed the residential *Arnona* revenue that they would generate. Second, by reducing the *Arnona* revenue associated with residents, the current discount policy may also encourage local governments to aggressively target non-residential development. Third, the current system of local government financed discounts also increases fiscal disparities among local governments and places especially heavy fiscal burdens on economically-disadvantaged communities that have high concentrations of residents who are eligible for *Arnona* discounts. Finally, it results in a reduction of the property tax base and a net loss of revenues for local governments equal to

approximately one quarter of the total revenue from the residential *Arnona*. The full cost of the discounts decided by the State (central government or Knesset) is borne by local governments in the form of reduced *Arnona* revenues.

In particular, the current system of exemptions creates substantial fiscal problems for some local jurisdictions, especially those with low levels of *Arnona* revenue and high numbers of discount-eligible taxpayers. There is little question that the requirement that local governments must self-finance government mandated discounts and exemptions contributes to the fiscal disparities that exist among local governments in Israel. The data in Table 1.7 show that discounts reduce *Arnona* revenues by an average of 36% in local governments in the five lowest socio-economic clusters, but by an average of only 15% in local governments in the top five clusters.

There are different options to address the fiscal problems of local governments created by the current system of discounts and exemptions. In order to define the most appropriate option to reform the current system, and thus reduce fiscal disparities and secure fiscal balances at both national and local levels, it is recommended to carry out further in-depth research, impact assessment analysis as well as to conduct consultation with key national and local stakeholders.

In the short run, it is recommended to better standardise *Arnona* discounts and exemptions and establish strict eligibility criteria for the receipt of *Arnona* discounts. In addition, in order to promote more consistency within the system of local government financing and coordination across the central government concerning local fiscal affairs, it is recommended that the regulation of the system of *Arnona* discounts and exemptions becomes the joint responsibility of the Ministry of Interior and the Ministry of Finance, as is the case in other matters related to local government budgets. Clause 12(b) of the Arrangement Law would need to be revised to require the approval of both ministries. The involvement of other ministries in the discussion of reforming the system of *Arnona* discounts could also be envisaged. Finally, a consultation platform or forum could be established with representatives of the different associations of local governments (Federation of Local Authorities, Federation of Regional Councils, etc.) to foster vertical coordination across levels of government on local finance matters.

#### *Exemptions and rebates provided to non-residential Arnona taxpayers*

There are numerous exemptions and rebates provided to non-residential *Arnona* taxpayers. They raise no equity issues, but they substantially reduce the tax base. By reducing *Arnona* revenue they put fiscal pressure on local government budgets, and due to the unequal spatial distribution of exempt property, they increase fiscal disparities among local authorities. The *Arnona* equalisation fund established in 2017 should hopefully reduce these disparities in the future. Any exemption granted to non-residential property in effect provides a subsidy to the users of that property. The exemptions are often justified on the grounds that the use of an exempt property, perhaps for a government office, by a hospital, or a house of worship, provides a benefit to the community that more than compensates for both the lost *Arnona* revenue and the cost of public services that benefit that the exempt property. These issues have not been systematically studied. A full review of the benefits and costs of exemptions and rebates granted to non-residential property should be undertaken by the government.

#### ***Policy recommendation 7:***

***Allow some degree of rate setting by local governments. Extra revenues could be used to increase spending on delegated or discretionary functions***

Local governments in Israel have very little control over local tax rates. 95% of the tax revenue raised by local governments in Israel is collected using rates set by the central government and any changes to these rates must be approved by the Ministries of Finance and Interior. The degree of local tax autonomy is *de facto* quite limited. It is the view of the OECD that local tax autonomy should be increased, by allowing

local governments some degree of freedom to set their own *Arnona* rates. As a general guideline, subnational governments need own-source revenues, on which they have some leeway over tax rates and bases because this contributes to accountability and efficiency of local public service provision, as underlined in one of the 10 guidelines of the recent OECD Handbook for Policy makers to make decentralisation work (OECD, 2019<sup>[6]</sup>). Tax autonomy encourages local residents to evaluate costs and benefits of local service provision and benchmark local government performance against itself as well as with neighbouring jurisdictions. This also facilitates yardstick competition which encourages local politicians to maximize the welfare of local residents instead of promoting their own self-interested goals.

As suggested in policy recommendations 4, 5, and 6, increased local government discretion in setting rates could be combined with various structural reforms of the *Arnona* system that would somewhat reduce various aspects of local autonomy that now exist.

Several options could be pursued in granting local governments more tax rate autonomy. The first option would be to set bands with a minimum and maximum allowable rate for both residential and non-residential property, and let local governments set their rates anywhere between the minimum and maximum rates. It is possible, perhaps probable, that with this type of system most local governments will set their residential rates close to the minimum of the residential band, and their non-residential rate close to the maximum of the non-residential band.

A second option, consistent with our recommendation 1, involves the linking of residential and non-residential rates. This kind of linked system has long been used in a number of OECD countries including Germany and France. The general idea is to constrain local governments' ability to change the balance between residential and non-residential rates by linking changes in one set of rates to changes in the other. A third option sets an additional constraint, requiring that local rates aren't too far above or too far below the average tax rate set by either a subset of local governments or all local governments. This kind of system can be complicated. Box 3.2 provides a brief description of the French system of linking residential and business tax rates.

This type of system is complex, but it can also be made rather flexible. For example, exemptions to the linkage rules could be introduced in order to incentivize local governments to merge, or to reward "strong" municipalities, which operate efficiently (see policy recommendation 12).

### Box 3.2. Rules for linking residential and non-residential tax rates – the case of France

A set of rules aims to prevent local assemblies from approving substantially different tax rates for their residents and for their businesses, and from setting rates that are too different from the average tax rate of neighbouring local governments. These tax rate linkages apply to three local taxes on residents or property owners – the *taxe d'habitation*, which is a resident tax levied on all residents, whether they are property owners or not, the property tax on undeveloped land (*taxe foncière sur les propriétés non bâties*), the property tax on developed land (*taxe sur les propriétés bâties*), and to the property tax on businesses (*Cotisation foncière des entreprises*).

The rates of each of the three residential taxes cannot exceed 2.5 times the corresponding average rates for the previous year in the municipalities of the *département* or if the latter is higher, the average rate in all French municipalities in the previous year. Also, the rate of the *Cotisation Foncière des entreprises* cannot exceed 2 times the average rate in all the municipalities in the previous year.

A second set of rules aims at assuring that property tax changes faced by residents or property owners are proportionate to property tax changes on businesses. In the simplest case, the local assembly chooses to change each of the four rates by the same percentage relative to the previous year (proportional variation). If the local assembly chooses to change the rates in a non-proportional way, two additional constraints are set. First, the rate of change of the property tax on undeveloped land must increase or decrease less than the rate of change on residential property. Second, the property tax rate on businesses cannot increase faster (or decrease less) than the tax rate change on residents, (or if the later, the weighted rate of the taxes on residents and on developed and undeveloped property). In addition, special constraints are put upon the co-variation of rates for municipalities within communities.

Source: French Ministry of Interior (2018<sup>[7]</sup>), *Guide pratique sur le vote des taux des impôts directs locaux et taxes assimilées*, [https://www.collectivites-locales.gouv.fr/files/files/finances\\_locales/fiscalite\\_locale/fiches\\_fdl/guide\\_votedestaux.pdf](https://www.collectivites-locales.gouv.fr/files/files/finances_locales/fiscalite_locale/fiches_fdl/guide_votedestaux.pdf)

#### **Policy recommendation 8:**

***The government should actively assist local governments in increasing their Arnona collection rate by providing training, technical assistance, and capital grants for the modernisation of computer systems***

Raising *Arnona* collection rates is a key challenge for many local governments. The statistics (see Table 1.7) show the seriousness of the problem. In 2016, the collection rate in the bottom five socio-economic clusters was below 75%, and in the bottom two clusters below 50%. The exact reasons for the low collection rates are not known to the OECD. In fact, it appears that the government has almost no data on the administrative and collections costs associated with the *Arnona*. It is possible that collection rates are high in some local governments because those local governments have the resources to devote to tax administration, while other jurisdictions lack both the expertise and the capital infrastructure needed to effectively and efficiently collect the *Arnona*.

It would be useful to know whether there exist substantial scale economies in the administration and collection of the *Arnona*, whether regional collaboration in *Arnona* administration may be cost effective, and whether the use of private collection companies reduces collection costs. Knowledge of the relationship between collection rates – measured as *Arnona* revenue as a percentage of net *Arnona* charges – and spending on tax administration would also help in the design of policies to improve collection rates.

The government should actively assist local governments in increasing their *Arnona* collection rate by providing training, technical assistance, and capital grants for the modernization of computer systems. The Israel Tax office could enter into voluntary agreements with municipalities with low collection rates. Under those agreements, the Tax Office could directly assist local governments in their efforts to raise *Arnona* collection rates.

## Policy recommendations for reforming the *Arnona*

The next two recommendations propose that the *Arnona* be reformed by converting it from an area-based to a market value-based property tax system. The reform process should start with the non-residential *Arnona* (recommendation 9) and then be followed by the implementation of a value-based residential *Arnona* (recommendation 10). Recommendation 11 calls for the expansion and reform of the Balance Grant. The explicit purpose of the Balance Grant is to reduce the fiscal disparities that exist among local governments in Israel. The current allocation formulas can be reformed so as to better target central government resources to the most disadvantaged local governments. The final two recommendations suggest steps to enhance cooperation among local governments and propose research on the quality of public service delivery by local governments.

### ***Policy recommendation 9: Establish a value-based system of property taxation for all non-residential property***

As detailed in Chapter 2 of this report, there are a number of advantages to a value-based property tax system. Note that Box 2.2 (Chapter 2) highlights a set of guiding principles for property tax reform, which were developed by the OECD. These principles include a statement that whenever possible property taxes should be based on the market value of property.

For reasons outlined below, it will be relatively easy to establish a value-based non-residential *Arnona*. Hence, the OECD recommends that the government implement a value-based non-residential *Arnona* prior to the conversion of the residential *Arnona*. During the transition to a value-based property tax system, the government should split the residential and the non-residential *Arnona* into two separate taxes.

A value-based non-residential property tax system is not a radical reform. Until the 1960's, Israel utilised a value-based system of property taxation. Properties values are also part of the present Israeli tax system. Both the local Improvement Levy, and the central government's Betterment tax are based on changes in the market value of property. Moreover, two recent academic studies present evidence of direct or indirect links between *Arnona* tax collections and property values (Horne and Felsenstein, 2010<sup>[8]</sup>; Portnov, McCluskey and Deddis, 2001<sup>[9]</sup>). Comprehensive market value data on non-residential property is not currently available in Israel. However, a great deal of data needed to calculate market values are already available in the form of information that businesses must use to comply with existing taxes, such as the corporation business tax and transactions taxes. Information on construction costs of non-residential properties and on the rental value of property can all be used to help developing estimates of market values. The fact that the number of non-residential parcels is so much smaller than the number of residential parcels, will make the implementation of a value-based non-residential property tax much easier to complete. Also, special discounts for "needy" taxpayers are not needed for the taxation of non-residential property, although exemptions for very small businesses might be considered.

During transition period from an area-based to a value-based tax system, large changes in tax liability would certainly need to be phased in over a number of years. In the transition to a value-based business property tax system, particular attention must be paid to the interactions of the new tax with the rest of the tax system. Property taxation must be aligned with other forms of capital taxation (including the betterment

tax) and with user fees. Coordination with the income tax system is important, especially if it includes the taxation of (imputed or actual) rents.

Finally, any tax reform may have important implication for fiscal disparities across local governments. Reform should always be accompanied with appropriate changes to existing government grant programs so as to prevent unintended increases in fiscal disparities.

***Policy recommendation 10:  
Establish a value-based system of residential property taxation***

Although the *Arnona*, as an area-based property tax system, has many of the positive attributes of any property tax system, it compares poorly to a value-based system in terms of both vertical and horizontal equity. Area, even when adjusted by other factors, is a quite imperfect proxy for value, and provides a base that is very imperfectly linked to the ability-to-pay principle. A value-based system with a single-residential rate applied in each local government will result in considerably more transparency about the operation of the local property tax, especially if the assessed values of each property are publicly available.

The most common criticism of a value-based system compared to an area-based system is that it is much more complex, and costly to administer. While that was undoubtedly true in the past, recently developed techniques for property assessment combined with new technologies have greatly reduced the costs involved in determining the value of residential property (see Boxes 2.3 and 2.4). Property assessors argue that the two most important factors in determining the value of property are location and size. As long as both of these are known, it is not terribly difficult or expensive to develop a reasonably accurate assessment valuation model.

That being said, the establishment of a value-based residential property tax system will involve a considerable investment in the training of property tax assessors and an investment in the technology that is the foundation of a modern assessment office. The process will undoubtedly be considerably more complex, time consuming, and costly than establishing a value-based system for non-residential property taxation (policy recommendation 9). For this reason, the government should only begin implementing a value-based property tax system for residential property after it has successfully converted to a value-based system for non-residential property. In the short-run, the government could initiate a study of contemporary property assessment techniques and analyse which methodology and technology will best fit the Israeli situation. The government should set out a strategy to move to a value-based system overtime.

***Policy recommendation 11:  
Consider increasing the balance grant and simplifying the allocation formula***

The design of the balance grant formula is consistent with the fundamentals of revenue equalisation. According to OECD guidelines, equalisation mechanisms, if properly designed, enhance fiscal equity (citizens are treated equally by the public sector regardless of their place of residence) and fiscal efficiency (by discouraging fiscally induced migration - mobility of factors in response to differential net fiscal benefits across the nation). Care therefore must be exercised in the design of such program that they do not inadvertently contribute perverse incentives that may lead to a misallocation of resources and thereby retarding the growth of the regional and national economies (OECD, 2019<sup>[6]</sup>).

As shown in Tables 1.10 and 2.6, balance grants contribute to lowering the fiscal disparities among local authorities. Their ability to reduce the existing fiscal disparities among local governments (see Table 2.5) could be improved by increasing the overall amount of the grant and by simplifying the highly complex allocation formula. Improvements in the formula could be made on both the tax capacity side (“normative revenue”) and on the fiscal needs side (“normative expense”). On the revenue side, disentangling the tax capacity component, which aims at lowering the disparities in potential tax revenue, and the incentives



given to local authorities to collect revenue might be useful. Reforming the *Arnona* and allowing local governments to use alternative sources of local tax revenue will also require changes in the definition of normative revenues. On the expenditure side, it would be helpful to make an explicit delineation between the normative fiscal needs deriving from the government standards, and additional expenditures based on local preferences. Formula improvements which simplify the allocation formula would be very helpful in enhancing the transparency of the government's transfer system.

***Policy recommendation 12:***

***Enhance cooperation among local governments by providing incentives for the merger of small neighbouring local governments, the joint provision of some public services, or the sharing of tax bases***

While many policy initiatives for improving Israel's system of local government public finance involve reforming taxes and other revenue instruments, and instituting reforms of the system of intergovernmental finance, improvements can also come through the reorganisation of local governments or through the development of mechanisms to enhance cooperation among local governments.

Although the merging of local governments is political challenging, there are circumstances, such as a merger of two small adjacent jurisdictions, where mergers would allow for the exploitations of scale economies. In these cases, the government should take steps to encourage and incentivise these mergers.

More generally, the government should continue its efforts to encourage cooperation among neighbouring local governments. Continued support of "regional clusters" (described in Chapter 1) should be continued. Assigning responsibility for the delivery of specific services directly to the clusters should be encouraged. Cross jurisdiction cooperation on specific projects and the sharing of technical expertise among local government officials may both be relatively low-cost ways of improving the delivery of public services.

In many OECD countries, large metropolitan areas are composed of a central city surrounded by a large number of independent local governments. The Tel Aviv metropolitan area (Gush Dan) is one example. All too frequently, local governments compete with each other to attract businesses and high-income residents, while attempting to exclude residents and land uses that are considered undesirable. The actions of individual governments, while perhaps serving the short-run interest of their residents, often have significant negative consequences for the metropolitan area as a whole, leading to patterns of inefficient development and growing fiscal disparities. Examples of policies to address these issues come from the U.S. and France. The U.S. experience (described in Box 3.3) focuses on the sharing of non-residential tax base among all local governments within a single metropolitan area.

The French experience involves the creation of interjurisdictional cooperative bodies, (described in Box 1.1) that have proved to be successful. The French experience with regional cooperation is particularly relevant to Israel because both countries are unitary countries sharing a solid tradition of centralization; metropolitan areas in both countries contain a large number of local jurisdictions; and local governments in both countries rely heavily on a local business tax (the non-resident *Arnona* in Israel). Also relevant is the fact that the French reformed their "*taxe professionnelle*" (the local business tax) over a ten-years period employing both a territorial reform which incentivizes a *taxe professionnelle*-sharing within new forms of inter-municipal bodies ("*Communautés à fiscalité unique*"), and a robust *reform of local taxation* (ten years later), which included the removal of the *taxe professionnelle* and the establishment of new forms of local taxation on businesses.

### Box 3.3. Metropolitan area tax base sharing—the Minnesota (USA) experience

The seven-county metropolitan area that includes the *Twin Cities* of Minneapolis and St. Paul contains 182 general-purpose local governments. In the late 1960s concerns developed that competition among local governments for non-residential tax base was resulting in growing fiscal disparities within the metropolitan area, and that this competition was leading to inefficient and environmentally harmful patterns of regional economic growth. In 1971, the Minnesota Legislature responded to these concerns by establishing a metropolitan area tax base sharing program, formally known as the Fiscal Disparities program.

Under the legislation, all local governments in the metropolitan area must contribute 40% of the growth in commercial, industrial, and public utility property tax base since 1971 into an area-wide shared pool. By 2016, the shared pool of area-wide tax base was worth \$373 million and was equal to one third of the total non-residential tax base. All general-purpose local governments in the metropolitan area share in the distribution of revenue from the shared tax base. The property tax revenue raised each year by taxing the shared base at an area-wide rate is allocated among local governments using a formula that distributes per capita amounts in a manner inversely related to the size of each local government's per capita property tax base. The property tax base is defined as the market value of both residential and non-residential property. Thus, local governments with a below-average per capita tax base, receive an above-average allocation from the shared base. In 2016, 99 out of 182 local governments in the Twin Cities metropolitan area were net recipients from the shared tax base, meaning that their per capita distribution from the tax base exceeded the per capita amount they contributed to the shared base because of growth in their non-residential tax base.

Data indicate that since the program went into effect in 1975, it has reduced fiscal disparities within the metropolitan area. The evidence on whether the tax-base sharing program has contributed to a more efficient pattern of metropolitan area economic growth is somewhat less clear. For an early economic assessment of the program see Reschovsky (1980<sub>[10]</sub>).

#### ***Policy recommendation 13:***

#### ***Support research to measure the quality of public service provision of local governments***

Local governments play a key role in Israeli society. They provide Israeli residents with a wide range of public services. It appears, however, that relatively little research has been conducted on the efficiency and effectiveness of local governments. In order to assess whether public resources are being spent wisely, it is important to assess the quality and quantity of public service delivery. The government should encourage and support a robust research agenda that focuses on assessing public service quality and evaluating the performance of local governments in delivery essential public services.

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## Annex A. The valuation of immovable property

Table A A.1. Assessment and valuation of immovable property, selection of OECD countries

Country	Coverage				Assessment and valuation			
	Scope	Main purpose	Other types of property taxed	Valuation method	Frequency of market value updates	Last market value update	Other updating methods	Responsibility for tax base setting
BEL	Land and buildings	Residential and business	Undeveloped land, agricultural land	Income method	Every ten years	1975	Consumer price index	Federal and regional government
CHL	Land and buildings	Residential and business	Undeveloped land, agricultural land	Sales prices, cost method and income method		2009/2014		Federal government
CZE	Land and buildings	Residential and business	Undeveloped land, agricultural land	Area-based assessment				National government
DEU	Land and buildings	Residential and business				1935/1964	Index	National government
DNK	Land only	Residential and business	Undeveloped land, agricultural land	Sales prices	Bi-annually	2011 On-going reform		National government
ESP	Land and buildings	Residential and business	Undeveloped land, agricultural land	Sales prices			Various indices	National government
EST	Land only, all types of land	Residential and business	Undeveloped land, agricultural land	Sales prices		2001		National government
FIN	Land and buildings	Residential and business	Undeveloped	Sales prices for land, cost method for buildings	Every five years		Construction price index	National government
FRA	Land and buildings	Residential and business	Undeveloped land Agricultural land	Rental value	-	1961 and 1970 (2017 for business premises)	-	National government
GBR	Land and buildings	Residential and business	None	Sales prices		1991		National government
HUN	Land and buildings	Residential and business	Undeveloped	Sales prices	Annually			National government
IRL	Buildings only	Residential and business	None	Sales prices				National government

Country	Coverage				Assessment and valuation			
	Scope	Main purpose	Other types of property taxed	Valuation method	Frequency of market value updates	Last market value update	Other updating methods	Responsibility for tax base setting
ISR	Land and buildings	Residential and business	Agriculture	Area-based assessment			Consumer price index	
ITA	Land and buildings	Residential and business	Undeveloped land, agricultural land	Sales prices and cost method				National government
JPN	Land and buildings	Residential and business	Undeveloped land, agricultural land	Sales prices and cost method	Every three years	2012		National government
KOR	Land and buildings	Residential and business	Undeveloped land, agricultural land	Sales prices	Annually			National government
LUX	Land and buildings	Residential and business	Undeveloped land, agricultural land	Sales prices	No update			National government
MEX	Land and buildings	Residential and business	Undeveloped land,	Sales prices	Annually	2014		
NLD	Buildings only	Residential and business	Undeveloped land	Sales prices (and other methods for business property)	Annually	2014		National government
NOR	Land and buildings	Residential and business	Undeveloped	Sales prices	Every ten years		House price index	National government
NZL	Land and buildings			Sales prices		Varies		Local government
POL	Land and buildings	Residential and business	Undeveloped land, agricultural land	Area-based (residential) income method (business)				
PRT	Land and buildings	Residential and business	Undeveloped land, agricultural land	Sales prices	Every three years			National government
SVK	Land and buildings	Residential and business	Undeveloped land, agricultural land	Value for land and area-based assessment for buildings				National government
SVN	Land and buildings	Residential and business	None	Value		Ongoing reform		Local government
SWE	Land and buildings	Residential and business	None	Sales prices			Income base accounts	National government
TUR	Land and buildings	Residential and business, except	Undeveloped land, agricultural land	Sales prices for land, cost method for buildings	Every four years		GDP inflator	

Country	Coverage				Assessment and valuation			
	Scope	Main purpose	Other types of property taxed	Valuation method	Frequency of market value updates	Last market value update	Other updating methods	Responsibility for tax base setting
		owner-occupied						
USA (e.g. Philadelphia)	Land and buildings	Residential and business	Undeveloped land, agricultural land	Sales prices, cost method and income method, depending on type of property	Annually	2013		State and local government

Source: OECD update based on Blöchliger, H. (2015<sup>[1]</sup>), *Reforming the Tax on Immovable Property: Taking Care of the Unloved*, <http://dx.doi.org/10.1787/5js30tw0n7kg-en>.

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**OECD Multi-level Governance Studies**

# **A Review of Local Government Finance in Israel**

## **REFORMING THE ARNONA SYSTEM**

This report provides a comprehensive analysis of the Israeli system of local government finance, with a focus on the role of the Israeli property tax, known as the Arnona. Local governments are financed through a combination of revenue, primarily from central government grants and from the Arnona, which is levied on residential and non-residential land and buildings but is based on their physical size rather than their value. The first chapter provides a description of the Israeli system of local government finance and compares it to local government finance in OECD countries. Using standard criteria for the evaluation of taxes, the second chapter assesses the strengths and shortcomings of the Arnona and the intergovernmental grant system. Attention is paid to fiscal disparities among municipalities and to the ability of the current system to provide all Israelis with adequate and equitable access to economic and social services and infrastructure. The final chapter presents a set of 13 policy recommendations divided between proposals for improving the existing Arnona system and a longer-run blueprint for a more substantial reform of the system of local government finance in Israel based on the establishment of a value-based system of local property taxation.



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