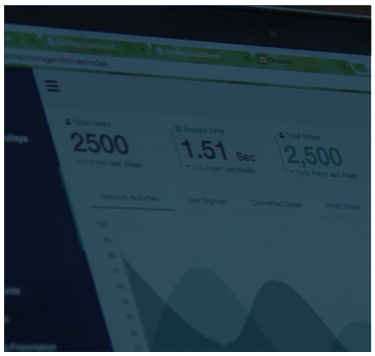
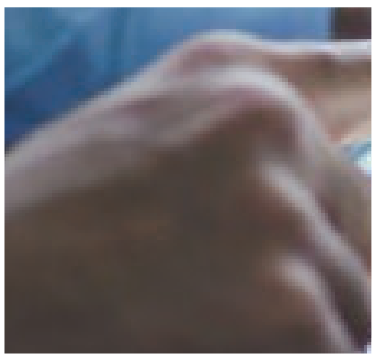


ANNUAL REPORT 2019

Government Debt Management Unit

Accountant General's Office
Ministry of Finance



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Message from the Accountant General

Several major events moved financial markets in 2019. These included US-China trade tensions, discussions around the United Kingdom's separation from the European Union, and the US's expansionary fiscal and monetary policy.

For Israel, economic performance remained strong throughout the year. Despite two elections, GDP grew approximately 3.5%. The ratio of debt, as a percentage of GDP, decreased in 2019, in line with a long-term trend. Lowering debt-to-GDP is a government goal, effects funding costs, and is an important indicator for the State's credit rating. There were also challenges in 2019, such as the budget deficit. At nearly 3.7% of GDP, 2019 ended with a higher budget deficit than it had targeted when it was originally set in 2018. For 2020, the government will be managed in the form of a continuation budget. This means that each month the government can spend 1/12 of the original 2019 budget (including principle debt payments and after accounting for inflation) until a new government is formed.

Israel's strong performance and economic resilience is reflective of growing confidence from both rating agencies and global investors. Examples of this include:

- Affirmation of the State of Israel's credit rating by all three rating agencies in both 2019 and 2020.
- In January 2020, the Ministry of Finance executed a USD 3 billion global bond issuance, with the lowest-cost-of-funding for a dollar-denominated issue.
- In the second half of 2019, for the first time in its history, the State executed two private placements.
  a. The first was executed for EUR 500 million for a term of 50 years. Only a small number of issuers have demonstrated the ability to issue at this maturity.
  b. The second private placement was for JPY 15 billion (approximately EUR 125 million) for a term of 7 years at a fixed interest of 0.15%. It was issued to a strategic Japanese investor, representing its first investment in Israel.
- FTSE Russell, the global index and data provider, announced Israel will join the World Government Bond Index (WGBI). This is welcome news for Israel's domestic bond market as it is a sign of growing global demand.

This report was produced by the debt managers within the Ministry of Finance. Success in managing debt requires balancing long-term strategic planning with short-term dynamism. It's important to have a plan, but also the ability to make borrowing policy and risk management adjustments in response to rapid changes in the capital markets. This balance is now being tested. The outbreak of coronavirus during the first quarter of 2020 had a negative impact on Israel's capital markets and macroeconomic data. Lower expected growth and a higher unemployment rate will lead to a significant increase in the government deficit and debt-to-GDP ratio.

To address the atypical financing needs, the Government Debt Management Unit increased its borrowing plan for both domestic and global markets. In the global markets, two additional global issuance were executed. The first, a USD 5 billion issuance with maturities of 10-, 30-, and for the first time ever, 100-years. The second global issuance, with a maturity of 40-years, also in U.S. dollars, was executed with heavy Asian-investor demand. This robust access to domestic and global capital markets, in the midst of a global pandemic, is a strong indicator of investors' confidence in the state's financial strength.

I would like to thank Mr. Gil Cohen, Senior Deputy Accountant General and Head of the Finance and Credit Division, Dr. Lior David-Pur, Head of the Government Debt Management Unit, and the Government Debt Management Unit employees for their professional and devoted work.

Respectfully,

Rony Hizkiyahu
Accountant General
Israel Ministry of Finance

SNAPSHOT

Annual Report No. 18 of the Government Debt Management Unit in the Accountant General's Office, for the year 2019

SNAPSHOT

We are proud to present the 2019 Annual Debt Report from the Government Debt Management Unit in the Accountant General's office.

DEBT-to-GDP RATIO

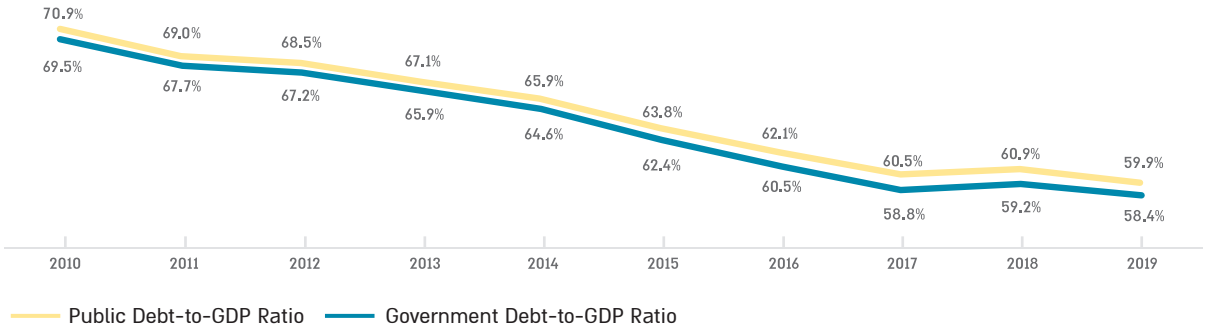
Over the past decade, the State of Israel has substantially decreased its debt-to-GDP ratio. The trend of lowering the ratio is a direct result of prudent economic policy and contributes to the country's financial strength.

In 2019, Israel's public debt-to-GDP ratio decreased by 1%, to approximately 59.9%, relative to 2018. Relative to 2018, Israel's government debt-to-GDP (does not include quasi-government or local authorities) decreased by approximately 0.8% to nearly 58.4%, below the Maastricht Treaty target (60%).

58.4%

Israel's government debt-to-GDP ratio declined significantly between 2010 and 2019, nearly 11%. This figure is below the Maastricht Treaty target (60%)

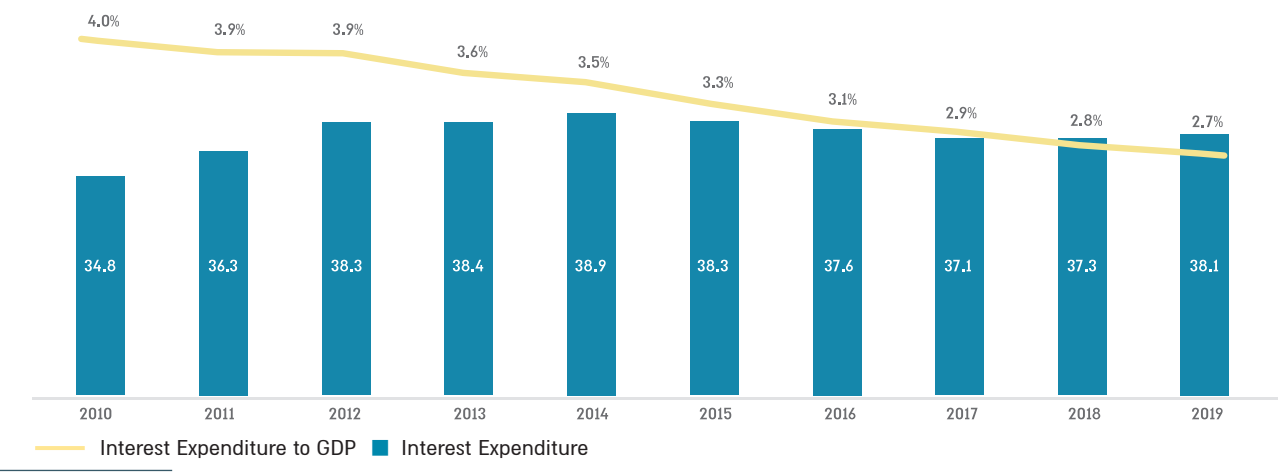
Government and Public Debt-to-GDP Ratio in 2010-2019 (percentage)



INTEREST EXPENSES ON GOVERNMENT DEBT

The rate of interest expenses relative to GDP was approximately 2.7% in 2019, compared to roughly 2.8% in 2018. This rate has steadily declined over the past decade. In addition, interest payments on local tradable debt declined nominally.

Interest Expenses Relative to GDP in 2010-2019 (NIS, billions; percentage)



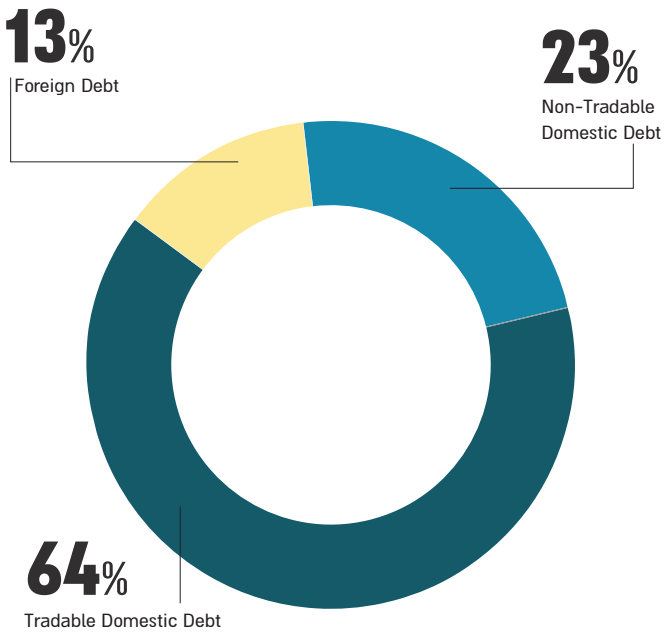
ISRAEL CREDIT RATINGS

In January and May 2020, S&P Global Ratings affirmed Israel's AA- credit rating and "stable" outlook. In April 2020, Moody's Investors Service affirmed Israel's A1 credit rating and updated its outlook to "stable". Also in April 2020, Fitch Ratings affirmed Israel's A+ credit rating and "stable" outlook.

Credit Rating Company	Rating	Outlook
Moody's	A1	stable
Standard & Poor's	AA-	stable
Fitch	A+	stable

GOVERNMENT DEBT FUNDING IN 2019

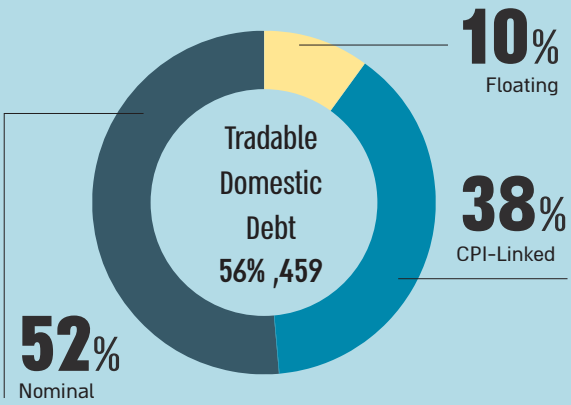
Money raised in the domestic market was comprised of approximately NIS 87 billion of tradable bonds, NIS 32 billion of non-tradable bonds, and NIS 17 billion of foreign currency bonds issued in the international markets.

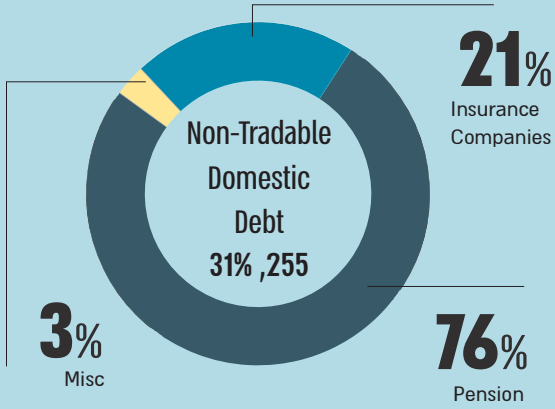


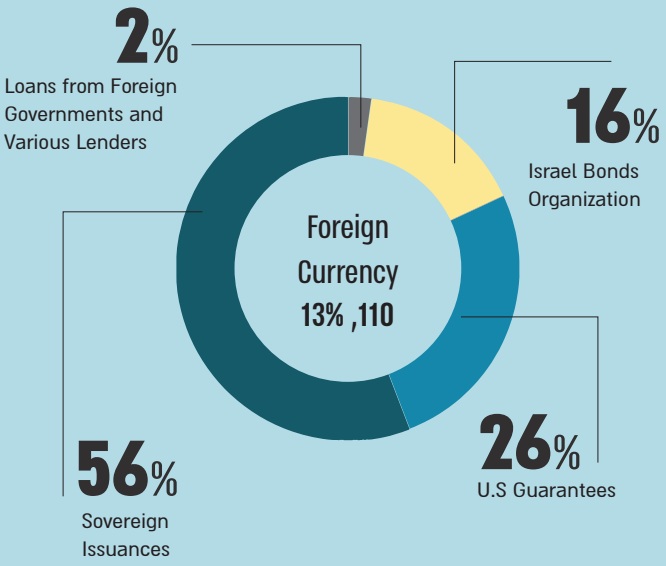
In 2019, government debt increased by approximately 4.4% to roughly NIS 823 billion. Government debt in 2018 was NIS 788 billion. The amount of net debt raised is the primary reason for the nominal increase. Other factors leading to the increase in 2019 include market factors, such as a significant devaluation of the shekel against the US dollar and euro.

GOVERNMENT DEBT PORTFOLIO

(NIS BILLIONS, PERCENTAGE)







GOVERNMENT DEBT RISK INDICATORS

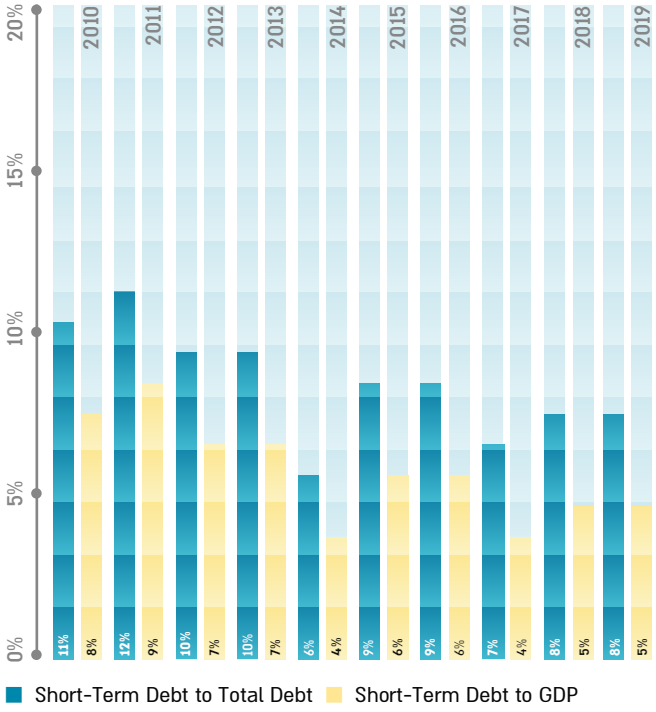
The rollover ratio and short-term-debt to GDP index did not change compared to last year and its levels remain at 8% and 5%, respectively. Due to the government's policy of extending government debt maturity, these levels are relatively low in historical terms.

Sensitivity of Government Debt to Market Factors in 2019

	Change in Government Debt (NIS millions)	Change in Government Debt-to-GDP Ratio (Percent of GDP)
Accumulated Increase in the CPI, in One Percentage Point	4,311	0.31%
Increase in USD-NIS Exchange Rate, in One Percentage Point	726	0.05%
Increase in EUR-NIS Exchange Rate, in One Percentage Point	347	0.02%

Government debt is highly sensitive to changes in the Consumer Price Index (CPI). In 2019, CPI-indexed debt was approximately 52% of the total government debt portfolio.

Short-Term Government Debt Relative to Total Debt and Relative to GDP in 2010-2019 (percentage)

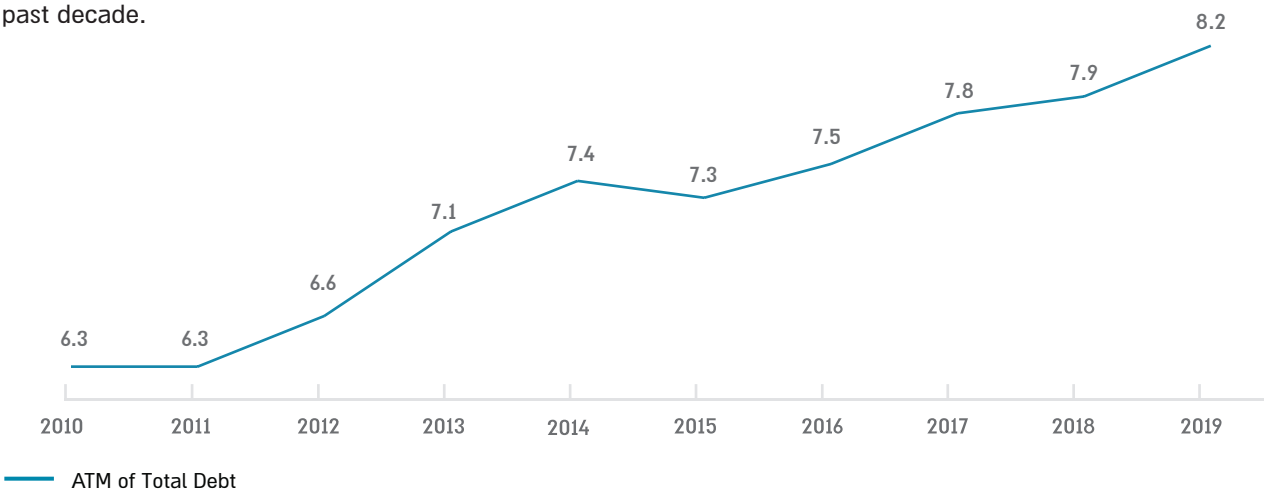


8.2

The rising trend in the average time to maturity (ATM) continues

Average Time to Maturity of Government Debt in 2010-2019 (years)

In 2019, the Average Time to Maturity (ATM) index of total debt increased to nearly 8.2 years. In 2018, the ATM was 7.9 years. Lengthening the ATM has been a consistent trend over the past decade.



GLOBAL DEBT

In January 2020, a dual-tranche issuance in dollars was executed in the global market. The tranches consisted of a 10-year series amounting to USD 1 billion, with a yield of 2.550% and a spread of 68 basis points above the benchmark Treasury rate and a 30-year series amounting to USD 2 billion, with a yield of 3.509 % and a spread of 115 basis points above the benchmark Treasury rate. This issuance was characterized by having the lowest funding cost for the State of Israel in dollars, investors from 40 countries participating, and approximately USD 20 billion of demand.

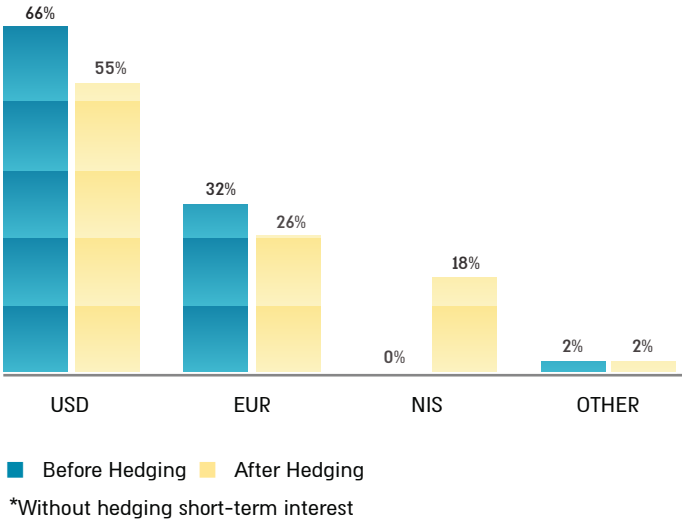
GOVERNMENT DEBT EXPOSURE TO CURRENCY RISK

In 2019, Israel's external debt was nearly 13% of total debt. Hedging is utilized to reduce the exposure of external debt to changes in the exchange rates. Hedging transactions are executed over the long-term through cross-currency swaps and over the short-term via forward and FX swaps.

As of the end of 2019, roughly 66% of foreign currency debt was denominated in USD (55% after hedging), approximately 32% in EUR (26% after hedging) and roughly 2% in other currencies.

As a result of hedging transactions, approximately 18% of external debt is denominated in shekels and therefore no longer exposed to changes in exchange rates.

Structure by Currency With and Without Hedging in 2019* (percentage)

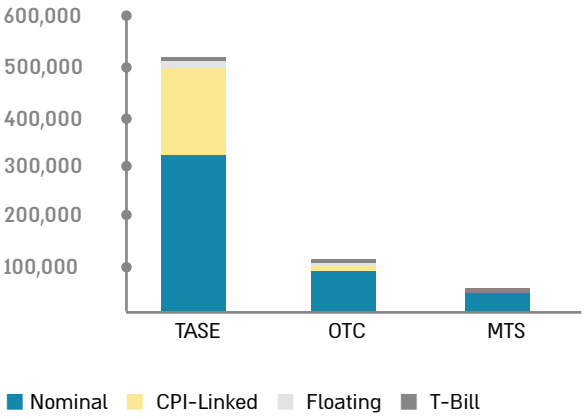


*Without hedging short-term interest

TRADING VOLUMES IN GOVERNMENT BONDS

As illustrated in the graph below, the majority of Israel's government bond trading takes place on the stock market.

Breakdown of Trading Turnover in Different Segments in 2019 (NIS millions)



THE CORONAVIRUS PANDEMIC

During the first quarter of 2020, the State of Israel began to feel the effects from the coronavirus pandemic.

Israel, like other countries, expects to take an economic hit. There will also be a significant increase in government expenditure, resulting from the government's economic stimulus plan. This increase in spending along with an economic slowdown is expected to significantly increase the deficit in 2020. Depending on the degree to which the deficit rises and the rate of economic growth, the debt-to-GDP ratio is expected to rise dramatically as well. At the same time, due to its pro-cyclical nature, March-May issuance of non-tradable debt - "designated bonds" issued to pension funds - has slowed considerably.

To make up the difference and finance the increased deficit, the GDMU is expected to increase issuances in both the tradable domestic market as well as the global markets. In May, funding in the tradable domestic market increased to NIS 10.5 billion. In March and April, two global bond issuances raised a total of USD 10 billion. The Bank of Israel, like other central banks, announced a range of measures to support the domestic market. This includes tools such as a NIS 50 billion secondary market government bond-purchasing program.

The pandemic has also had a noticeable impact on global equity and bond markets, with most indices falling more than 30%. In Israel's local market, the TA-35 index fell by approximately 27% and government bonds fell by roughly 5%. As of April, however, there have been some signs of market recovery.

In Summary

Implementing an effective policy for managing the government's debt, financing government activity, and funding the deficit is an ongoing challenge. Addressing this challenge requires long-term strategic planning, based on models, quantitative indicators, and comparative analysis.

Tactical adjustments to the strategic funding policy, based on market conditions and trends in Israel and abroad, are essential - and will ultimately decrease refinancing risk.

Moreover, efficient management of government debt requires a careful balance between the State as an issuer - aiming to minimize costs given the level of risk and the State as sovereign; aiming to support additional strategic objectives in the local and foreign markets. These objectives include: increasing liquidity of government bonds; improving the government bond market as a whole; exposing the Israeli economy to international investors; expanding the investor base, and creating benchmarks for companies that wish to issue in the capital markets abroad.

Pension funds require 30 percent of their assets be held in designated bonds. The large demand for these issues poses a significant challenge to liquidity and tradability in the capital markets and for tradable government bonds in particular. Additionally, the exposure level to the consumer price index, affects both the government debt and the interest budget.

The key factors for determining an effective debt management policy and preparing for adverse changes in the business cycle are: the establishment of a strategic policy for managing the financial risks of the government's debt, increased transparency of the strategic policy, and the use of advanced debt instruments for managing funding and liquidity. The impact of the coronavirus outbreak on financing needs in the first quarter of 2020 has increased the government's fundraising targets in both the domestic and global markets.

Respectfully,

Gil Cohen
Senior Deputy Accountant General
Head of Finance, Debt and Credit Division

Lior David-Pur
Head of Government Debt
Management Unit

STRATEGY

STRATEGY

GOVERNMENT DEBT MANAGEMENT GOALS

The main role of the Government Debt Management Unit (GDMU) is to finance the government through refinancing the government's debt and managing the long-term goals of the government's debt portfolio.
These activities take into account the State, both as an issuer, which strives to balance the trade-off between cost and risk, and the State as a sovereign, with goals of supporting development of the government bond market.

The amount of debt issued directly affects the ratio of government debt to GDP. It also affects the burden of debt in the state budget, expressed as interest payments on the debt. The borrowing plan is based on financing needs and expected redemptions for 2020 in accordance with the government's deficit target. The funding channels, ranges, and mix of issuances are determined according to a strategic plan, with tactical considerations derived from rapid changes in the financial markets.

ISSUANCE AMOUNT

The GDMU plans its long-term borrowing, of tradable debt in domestic and foreign markets, by utilizing structure-debt simulations and models, such as the 'Stairs Model'. Principles of the model include:

a. **Gradual redemption profile** - creating a stable debt structure.
b. **Consistent issuance policy** - issuing for benchmark terms each year.
c. **Steady state** - maintaining a gradual redemption structure and adoption of a stable issuance policy.

In addition, the GDMU aims to smooth issuance amounts and maintain adequate liquidity during the year, through pre-planning of issuances, switch and buyback auctions and other short-term cash flow instruments.

The amount of debt issued is dependent on redemptions and in recent years has totaled approximately 9% of GDP.

ISSUANCE STRATEGY

Issuance strategy is determined by a number of analyses. These rely, amongst other things, on models, indicators, and simulations that minimize the debt burden given the level of risk and qualitative considerations. These considerations include support and extending the government bond curve, increasing liquidity in government bonds, expanding the investor pool, and more. The issuance strategy is based on three main issuance channels:

- Tradable domestic borrowing
- Non-tradable domestic borrowing
- External issuance

In recent years, the amount of debt issued is approximately 60% tradable domestic debt, roughly 30% non-tradable domestic debt, and global debt at nearly 10%.

TRADABLE DOMESTIC ISSUANCE

Tradable domestic borrowing enables a central funding channel and comfortable access to the financial markets, even at times of uncertainty and significant financing needs. Additionally, this channel serves a strategic sovereign importance as it builds a foundation for financial markets, corporate financial instruments, loans, mortgages, derivative and more.

Main principles of issuance strategy in the tradable domestic market:

1 Nominal Debt Issuance

This is the dominant type of issuance in the local market due to current high exposure of the debt portfolio to the consumer price index (CPI). As of the end of 2019, the volume of CPI-linked debt was approximately 52%. The reasons for maintaining a CPI-indexed channel as part of the borrowing program are to diversify financing sources, supply market demand for an instrument that protects against inflation and issuance of non-tradable designated bonds, which are CPI-linked. At the end of 2019, local non-tradable debt represented roughly 31% of total debt.

2 Floating Rate Issuance

Due to expected redemptions of floating rate bonds in 2020 and 2021 and to maintain floating rate debt inventory, the borrowing plan for 2020 includes floating rate issuances via the 0526 bond series and a new bond that will be issued in 2020. The decision to issue floating rate debt is based on a number of considerations. These include cost-risk analysis, diversification of the government's sources of financing and increasing flexibility for debt management.

3 Government Debt Extension

In accordance with debt management policy for reducing refinancing risk, supported by a low interest rate environment, a significant lengthening of the debt maturity was executed, resulting in its highest level in ten years. Despite the lengthening of government debt, interest on tradable domestic debt has been steadily declining over the past decade. This comes as a result of market conditions, mainly the low-yield environment of government bonds.

In addition to routine auctions, three main tools are also utilized:

A SWITCH TENDERS

A switch tender assists in the strategic planning of government debt management and constitutes an integral part of the annual borrowing plan. Over the past three years, the average rate of switch tender funding was roughly 22% of domestic tradable funding. Goals of the switch tender include:

- **Reducing refinancing risk** - the GDMU executes switch auctions on purchased bonds with a short term maturity (less than one year). These tenders enable the GDMU to smooth the redemptions curve over the year and reduce refinancing risk.

- **Cash management** - switch tenders are carried out using the cash neutral method, in which the nominal value of the issued bond and the purchased bond is the same. This allows debt refinancing to be carried out without using funds. Switch tenders are also used as a tool for managing the government's cash flow, as they enable early redemptions and allow issuances to be spread out over the course of the fiscal year, as well as between years.

Switch tender policy:

- **Channel** - switch tenders are an essential financing channel derived from the annual borrowing plan. Bonds are chosen according to the borrowing strategy (linkage, maturities and series fill rate) and with tactical adjustments based on market conditions.

- **The purchased bond** - in addition to the conventional execution of switch tenders, where bonds with short-term maturity (less than one year) are exchanged for bonds with longer maturities, the GDMU also utilizes switch tenders for issuing new bond series. Subject to market conditions, the new series issued are On-The-Run bonds, while Off-The-Run bonds are purchased.

- **Frequency** - the GDMU aims to carry out switch tenders on a consistent basis, subject to market conditions and other debt management considerations.

- **Issuance of Off-The-Run bonds** - the issued bonds are selected based on market demand, liquidity enhancement, support for small series or correction of distortions in the secondary market.

- **Smoothing of issuance and redemptions** - the implementation of switch tenders for bonds maturing over the next calendar year (cross-year) allows for smoother issuances and redemptions over the years.

B BUYBACK TENDERS

Buyback tenders allow the State to purchase debt before it is redeemed against cash. These tenders are a customary tool in debt management policy and can strengthen debt portfolio structure and costs. **Goals:**

Manage government cash flow effectively | Reduce budgetary interest payments | Reduce refinancing risk

Buyback tender policy:

- **Frequency** - the GDMU aims to perform buyback tenders on a consistent basis, subject to market conditions and other debt management considerations.
- **Tender size** - tender size depends on government financing needs, cash balance and prices offered at the time of the tender.
- **The purchased bond** - the maturity of the purchased bond will be up to one year.
- **Issuance and redemption smoothing** - similar to switch tenders, buyback tenders for bonds that mature over the following calendar year (cross-year) allows for smoother payments of funds over the years.

Depending on the government's cash flow needs and market conditions, as part of refinancing risk management, for bonds maturing in 2020, the GDMU expects to execute switch auctions on: floating rate bond 0520 and CPI-linked bond 1020. For bonds maturing in 2021, the GDMU expects to execute switch auctions on: nominal bond 0121 and CPI-linked bond 0421.

C T-BILLS

In 2019, the GDMU resumed issuance of T-bills in compliance with its cash flow management.

The government will continue with T-bill issuance in 2020. The exact monthly issuance size is published each month in the GDMU's borrowing plan, and may vary substantially depending on the government's financing requirements and cash flow management needs that month.

NEW SERIES IN THE DOMESTIC MARKET

In 2020, the GDMU expects to open the following series: a 5 year fixed-rate series in place of ILGOV 1123, a 10 year floating-rate series in place of ILFRN 0526, a 3 year fixed-rate series in place of ILGOV 0722 and a 30 year CPI-linked series in place of ILCPI 0545.
The timing of exchanges will be decided on: size of the exchanged bond series, the issuance amount in the tradable domestic market, and the duration of the exchanged bonds.

MARKET

In 2019, J.P. Morgan Chase Bank (JPM) joined seven Israeli and six global banks, as a primary dealer in Israeli government bonds. Adding JPM to the list of primary dealers is expected to contribute to liquidity and increased tradability of the bonds. The purpose of primary dealership, among other things, is to develop an efficient and competitive government bonds market.
Primary dealers must meet obligations in the primary market (participation and purchases in this market) and in the secondary market (providing liquidity in the MTS, a designated marketplace for the primary dealers).
Additionally, primary dealers are entitled to exclusive benefits such as participation in the primary market, 'greenshoe' issuances, access to the government loan depository, and participation, as a potential counterparty, in hedging transactions.
Over the past few years, several changes have been made in the letter of appointment and work procedures for primary dealers. These changes were made in order to support the levels of liquidity and tradability in the secondary market and to encourage reliable and consistent demand for primary market offerings.

INCREASING LIQUIDITY

Trading volumes have a significant influence on bond liquidity and the government's funding costs. In late 2006, a reform was made by the Accountant General to create the primary dealership and tasked the primary dealers with the responsibility of purchasing, supporting, promoting, and distributing government bonds. In addition to the primary dealership reform, funding strategy and debt management responsibilities were assigned to the GDMU.

In order to increase liquidity and tradability of government bonds, the GDMU utilizes switch auctions for new bond series. This is to replace off-the-run bonds with new benchmark on-the-run bonds.

In March 2019, FTSE Russell, the global index and data provider, announced Israel had met the qualitative and quantitative criteria to join the World Government Bond Index, also known as WGBI.

On September 26, 2019, FTSE Russell announced that "Israel continues to meet all three eligibility criteria and effective from April 2020, Israeli local currency government bonds will be added to the FTSE World Government Bond Index".

Due to the uncertainty and high volatility stemming from the pandemic, the inclusion was postponed to May 2020.

As of May, shekel-denominated bonds will comprise 0.32% of the index on a market value weighted basis. Likewise, Israel's inflation-linked bonds will comprise 1.73% of the WGBI index comprising inflation-linked bonds.

Inclusion to WGBI is expected to increase demand for Israeli government bonds by passive investors who track the index, as well as attract new investors to the broad Israeli bond markets.

GLOBAL DEBT

In addition to being a significant financing source, as detailed in the global debt chapter, the GDMU views the issuance of debt in the global capital markets as an important tool for exposing the Israeli economy to foreign investors and expanding the investor pool. In accordance with debt management strategy, an annual issue is planned in the global capital markets for the purpose of creating a government yield curve, in both the dollar and euro currencies. Global issuances are subject to capital market conditions, and the government's annual financing needs.
In recent years there have been several issuances for tenors of 10 and 30 years. These tenors are in accordance with both the market's demand for long-term maturities as well as debt management policy for issuing long-term bonds and reducing refinancing risk.
As part of the strategy to reduce exchange rate exposure in the debt portfolio, the GDMU executes long-term hedging transactions through cross-currency swaps and short-term cash flow hedging through forwards and FX-swaps. Further details on the borrowing policy can be found in the global debt chapter.

NON-TRADABLE DOMESTIC ISSUANCE

According to the law, issues of non-tradable bonds must be carried out in the form of designated bonds. The volume of designated bond issuances can be volatile depending on pension portfolio returns and needs in a given month. As a result, it is challenging to perfectly estimate the volume of near-term issuance in the non-tradable channel. Any level above or below the forecast comes at the expense of debt issuance in tradable domestic market. Further details on the implications of designated bonds can be found in the section on non-tradable domestic debt.

MANAGING THE CORONAVIRUS PANDEMIC

In light of the coronavirus pandemic and expected rise in government deficit, the GDMU is expected to boost issuance in the tradable domestic market as well as in the global capital markets. This increase would adhere to the borrowing strategy and principles outlined in this chapter.

Funding in the tradable domestic market

The tradable domestic market is characterized by stability. Therefore, increasing funding through this instrument will be conducted gradually. The GDMU will also take into account the Bank of Israel's announcement from March 23, 2020, stating its intention to launch a NIS 50 billion government-bond-purchasing program in the secondary market.

In order to sustain the principles of debt management strategy, the GDMU will issue two new On-The-Run series that do not currently sit on the curve. They will be:

1. A 20-year fixed-rate series and;
2. A 5-year CPI-linked series

Funding in global capital markets

The GDMU is expected to significantly increase funding in the global capital markets. The GDMU is confident it can execute larger deals based on previous demand over subscription and feedback from investors regarding the strength and resilience of the Israeli economy. Over the years, the GDMU has worked diligently to broaden and deepen the investor base.

To remain aligned with the Average Time Maturity longevity strategy, the GDMU intends to issue mainly longer-term bonds with maturities between 10-100 years.

PRIMARY MARKET

ISSUANCES

NIS 18 BILLION

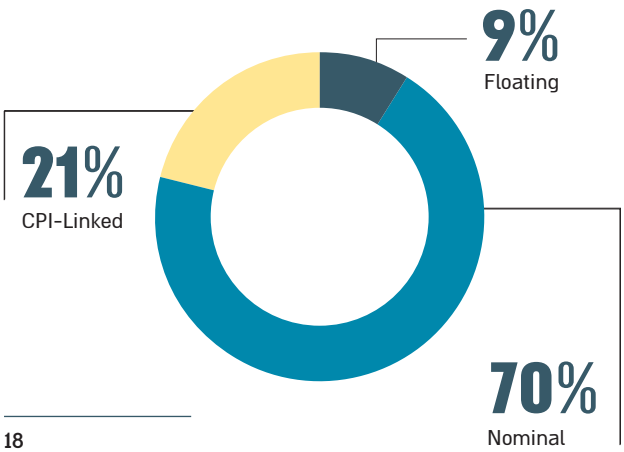
Net funding in the local tradable market was nearly NIS 18 billion

The fundraising policy for 2019 followed GDMU strategy, utilizing tactical adjustments, enabling funding to be spread out over the course of the year.
As in previous years, the majority of funding was financed by the domestic tradable market. The total domestic tradable debt raised in 2019 was approximately NIS 87 billion, compared to roughly NIS 61 billion in 2018.
In 2019, net funding in the local tradable market was nearly NIS 18 billion. In 2018, net funding amounted to almost NIS 11 billion. Funding and its deployment during the year is adjusted according to the monthly deficit as well as changes in government cash flow.

TRADABLE DOMESTIC DEBT

Funding in the domestic tradable market is comprised of nominal fixed-coupon bonds, inflation-indexed bonds and floating rate bonds.
Nominal fixed-coupon bonds encompassed the largest share with approximately 70% of the total (which also included about 56% fixed-coupon bonds and roughly 14% T-bills). This makes up the largest share because strategic debt management policy is to create a liquid nominal curve and diversify away from CPI-linked issuances.
CPI-linked bonds comprise roughly 21% of the total, largely stemming from issuance of designated bonds, which are all CPI-linked. Lastly, floating rate bonds comprise the final share, with approximately 9% of the total.
The balance of domestic tradable debt was roughly NIS 459 billion in 2019, compared to about NIS 444 billion in 2018.

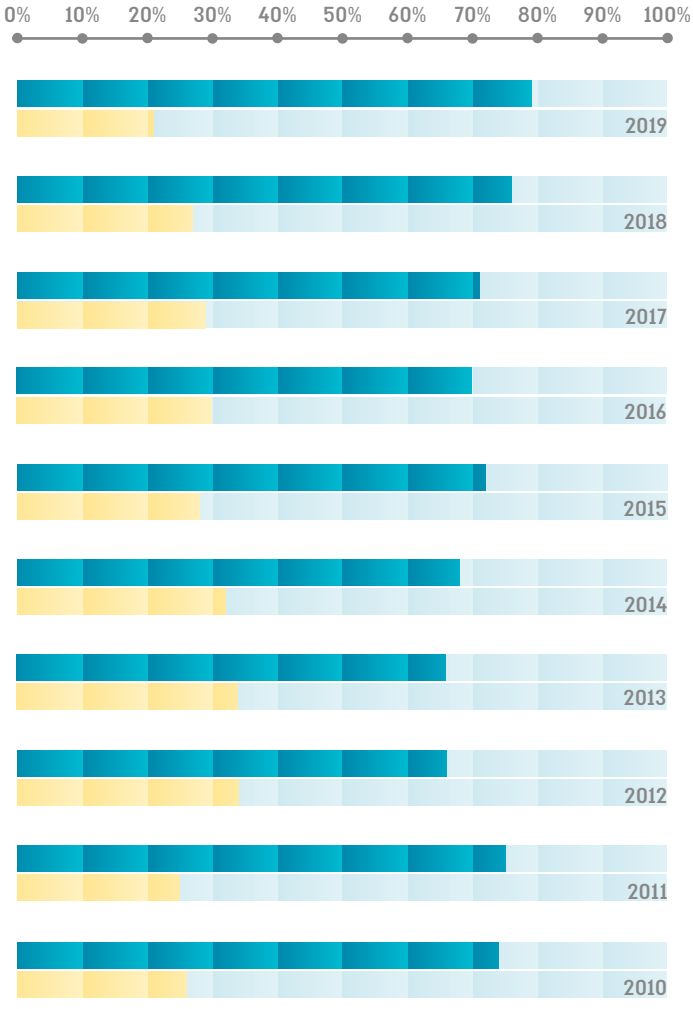
Tradable Debt Funding by Segment in 2019



Funding is executed through weekly auctions and switch auctions. In addition to new bonds, issuances are also carried out by expanding existing series (tapping).

The following graph illustrates the distribution of funding (data presented in the nominal fixed coupon bonds include T-bills and floating rate bonds).

Breakdown of Tradable Debt Types in 2010-2019



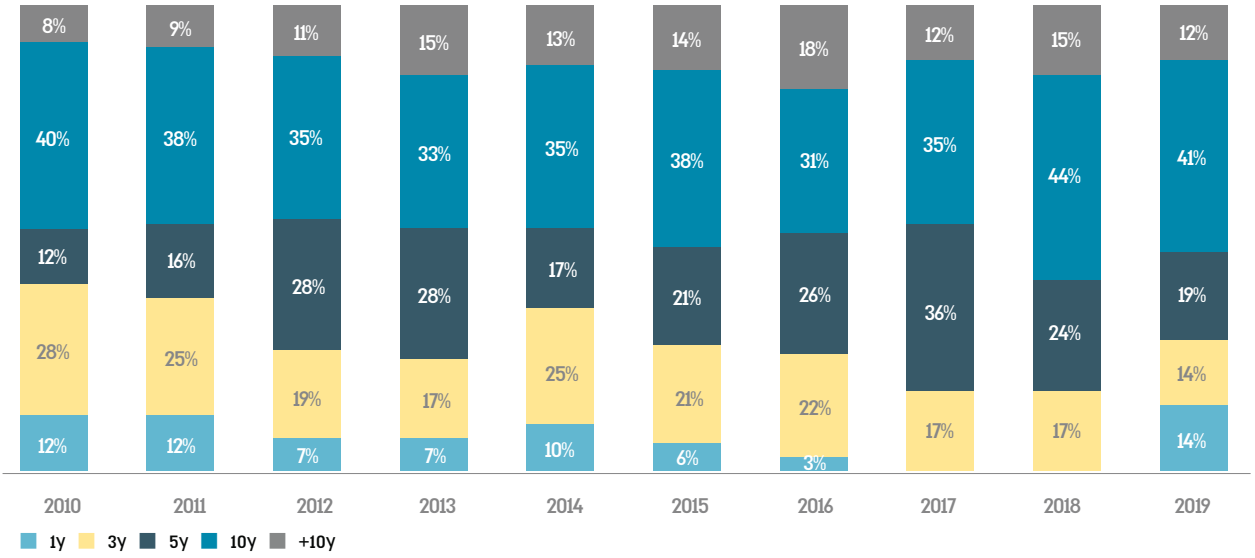
* Floating rate bonds and T-bills are included in the nominal bonds column

Nominal CPI-Linked

FUNDING IN THE TRADABLE DOMESTIC MARKET

Domestic debt is issued with benchmark maturities of 3,5,10 and 30 years. The following graph illustrates the distribution of funding by term to maturity. For the first time since 2016, the GDMU issued T-bills. This was done with the aim to efficiently manage cash-flow.

Distribution of Funding by Term to Maturity in 2010-2019



COVERAGE RATIO

The coverage ratio is calculated by dividing requested amount of bonds (demand) by offered amount of bonds (supply). This ratio reflects market demand and can be an indicator for various trends in the local economy.
Factors influencing coverage ratios:

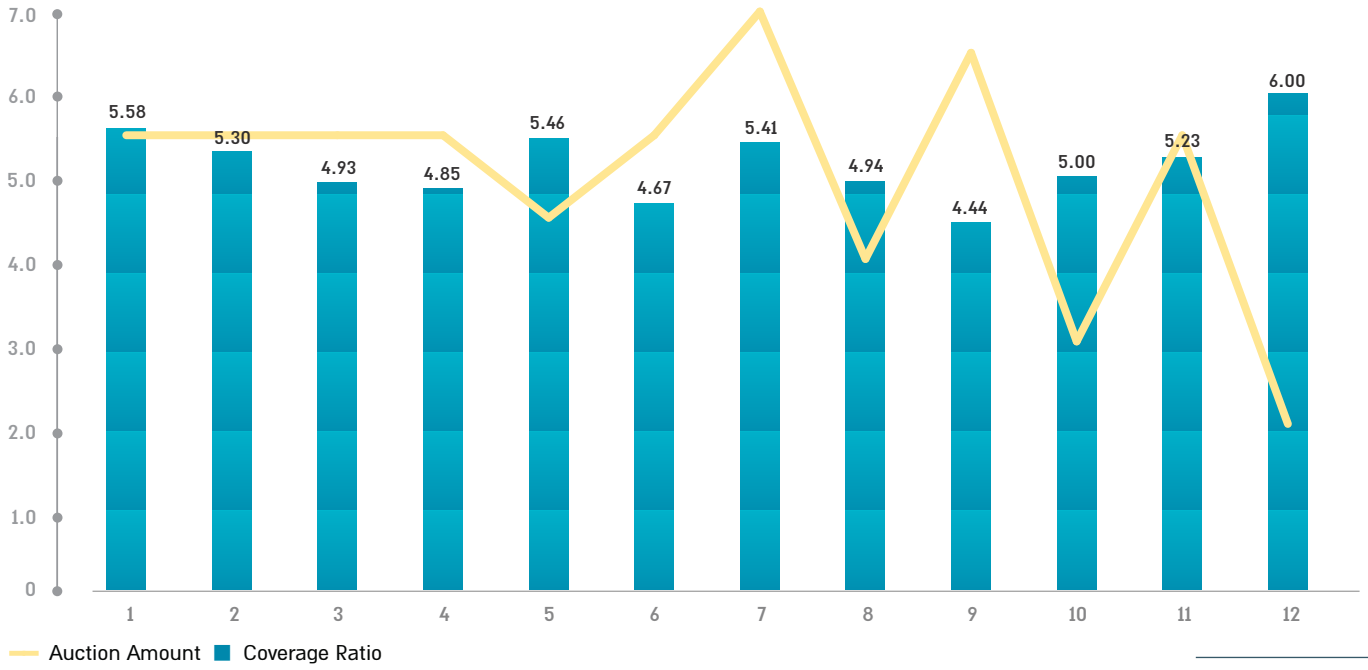
Domestic and global market conditions

Seasonality

Funding types and sizes

The following graph examines the coverage ratio (monthly average) relative to the amount offered. The average coverage ratio in 2019 was about 5.1 compared to approximately 5.7 in 2018.

Coverage Ratio and Auction Amount in 2019 (NIS, billions)



ATM

The following graph illustrates the average term to maturity of the funding. The average term to maturity remained high, as has been the case in recent years, at approximately 9.2 years (roughly 8.1 years inclusive of T-bills).

SWITCH AUCTIONS

At the end of 2007, the GDMU began using switch auctions to perform early redemptions of tradable government bonds with shorter maturities (less than a year) and replace them with different bonds with longer maturities.

Switch auctions enable funding to be spread out over the course of a year, allow more efficient management of the government's cash flow, and help replace less liquid bonds with new benchmark on-the-run bonds. Switch auctions also reduce rollover risk, budgetary interest payments, and increase ATM. Additionally, it improves flexibility when managing the government's debt and enables the GDMU to implement tactical adjustments in response to rapid changes in the financial markets.

In 2019, the GDMU executed switch auctions for a new bond series, resulting in approximately NIS 4 billion of bonds switched. In this instance, rather than switching bonds nearing maturity with existing longer-dated bonds, the switch auction for the new bond series completed the switch with newly-issued bonds of similar maturities.

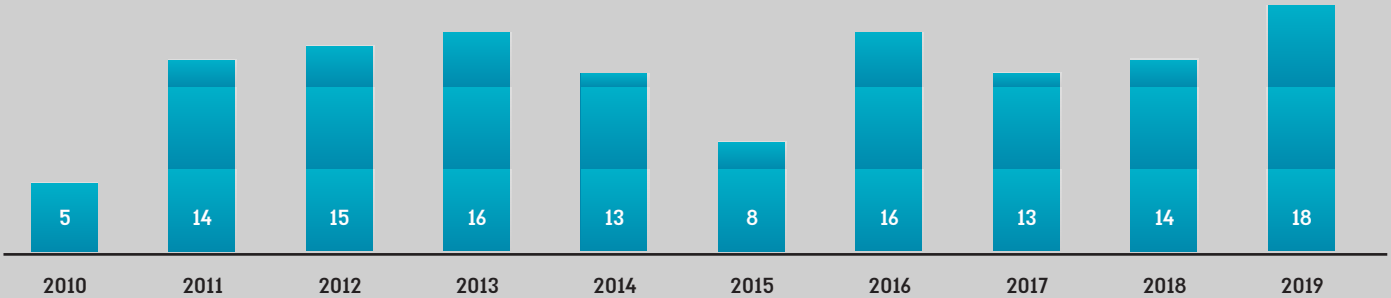
Switch auctions for the new bond series aim to increase liquidity of the issuances.

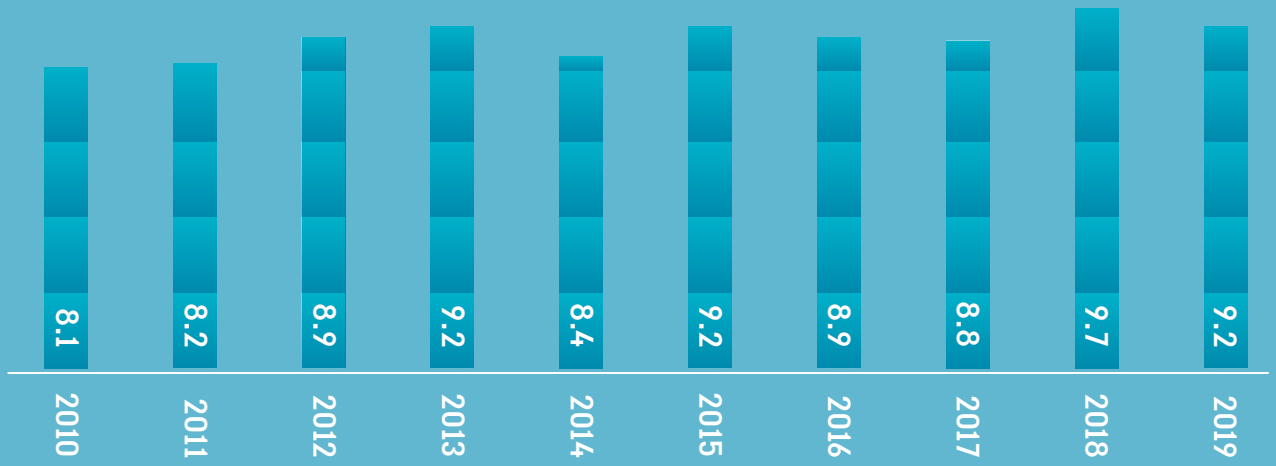
In 2019, total funding raised by switch auctions was approximately NIS 18 billion, compared to roughly NIS 14 billion in 2018.

The graph below illustrates switch auctions sizes over the past decade.

In 2019 the GDMU executed switch auctions for a new bond series, resulting in approximately NIS 4 billion of bonds switched

Switch Auctions (NIS, billions)





BUYBACK AUCTIONS

More than a decade ago, the GDMU began utilizing buyback auctions to redeem bonds prior to their maturity by purchasing them off the market. Buyback auctions differ from switch auctions because no new bonds are switched for the redeemed bonds. They are simply redeemed early.

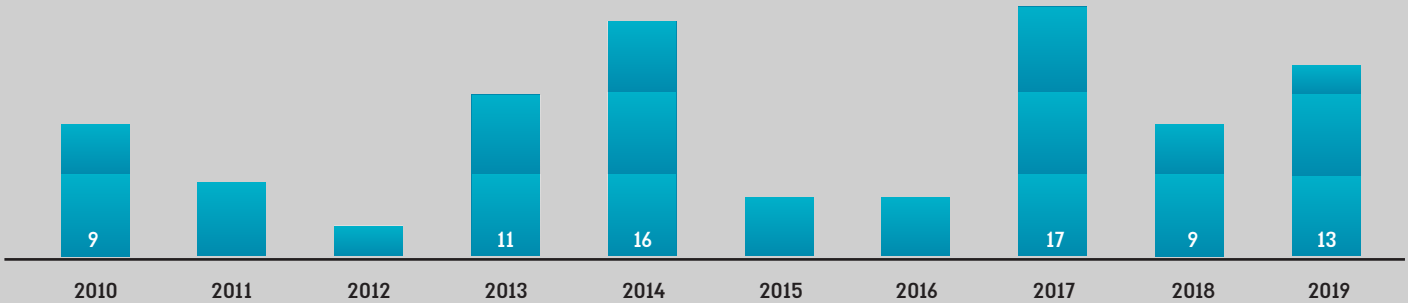
Main Objectives of Buyback Auctions:

- Managing the government's cash flow more efficiently
- Reducing refinancing risk
- Reducing budgetary interest payments

In 2019, total purchases using buyback auctions reached approximately NIS 13 billion, compared to roughly NIS 9 billion in 2018. The graph below illustrates buyback auction sizes over the past decade.

Buybacks (NIS, cost in billions)

In 2019, total purchases using buyback auctions reached approximately NIS 13 billion



Non-Tradable Domestic Debt

In 2019, the total amount of non-tradable domestic debt was roughly NIS 31.7 billion. This was raised using the following instruments:

Designated bonds for pension funds ("Arad") - These bonds have a fixed interest and CPI-linked rate. Arad's yields are higher than corresponding bonds in the market and they constitute a subsidy to pension funds. In 2019, the volume of issuances for these bonds was approximately NIS 24.7 billion, an increase of nearly 19% from 2018 (about NIS 20.8 billion). In 2019, the net amount raised with Arad bonds was roughly NIS 20.5 billion.

Designated bonds for insurance companies ("Hetz") From 1965 to 1990, non-tradable bonds called "Hetz" (life-linked) were issued. Hetz bonds were issued for insurance companies and featured a guaranteed yield. They had a fixed interest rate linked to an index between 4% and 6.2%. In the early 1990's, new entrants were excluded from receiving these bonds. Despite this, legacy insurance companies remain eligible. In 2019, the volume of issuances of Hetz bonds was roughly NIS 6.4 billion, an increase of nearly 51% from 2018 (about NIS 4.2 billion). This resulted in approximately NIS 2 billion in net capital raised.

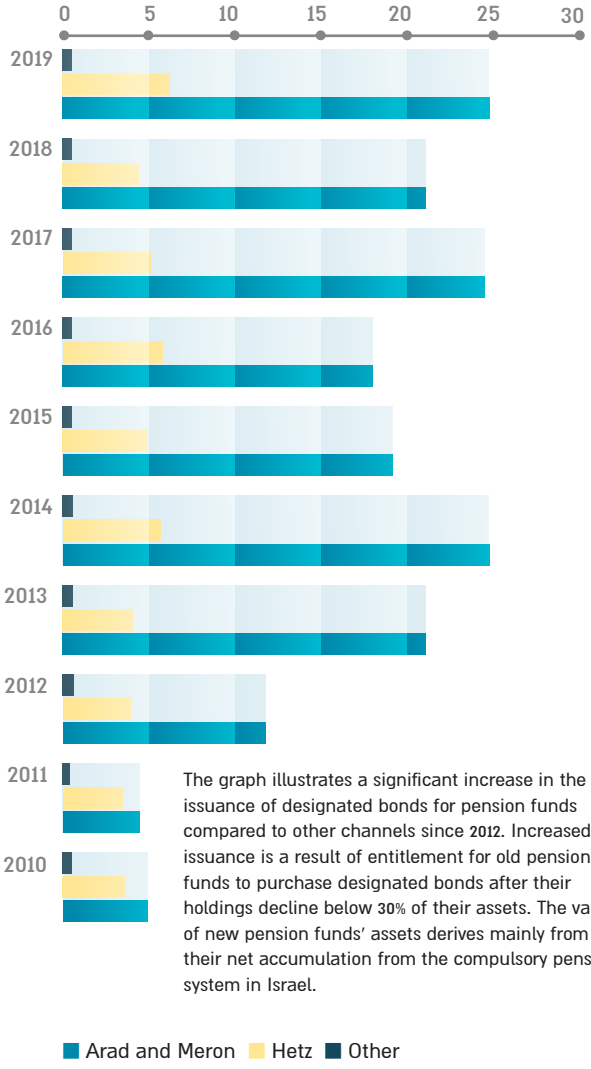
Various deposits ("Emissions") under the management of the Ministry of Finance - In 2019, nearly NIS 593 million were raised. This resulted in a negative net raise of approximately NIS 83 million.

As part of the pension fund reform in 2003, and in light of the actuarial deficits in some of the old pension funds, it was decided to lower the maximum investment rate of designated bonds to 30% of the estimated value of the fund's assets.
Additionally, it was agreed that in the future, all pension funds will purchase "Arad" bonds, yielding an effective coupon of 4.86% per annum, rather than "Meron" bonds which yield an effective coupon of 5.58% per annum.
The restriction of 30% led to a cessation in issuance of "Arad" bonds in 2004 and a low volume of issuances from 2005-2008.

Funding Segment	Principal Funding	Principal Redemptions	Net Funding
Arad and Meron	24,710	4,165	20,546
Hetz	6,415	4,273	2,141
Others	593	675	(83)
Total	**31,718**	**9,113**	**22,605**

*NIS millions, 2019

Domestic Funding by Non-Tradable Debt in 2010-2019 (NIS, billions)



The graph illustrates a significant increase in the issuance of designated bonds for pension funds compared to other channels since 2012. Increased issuance is a result of entitlement for old pension funds to purchase designated bonds after their holdings decline below 30% of their assets. The value of new pension funds' assets derives mainly from their net accumulation from the compulsory pension system in Israel.

IMPLICATIONS OF ISSUING DESIGNATED BONDS

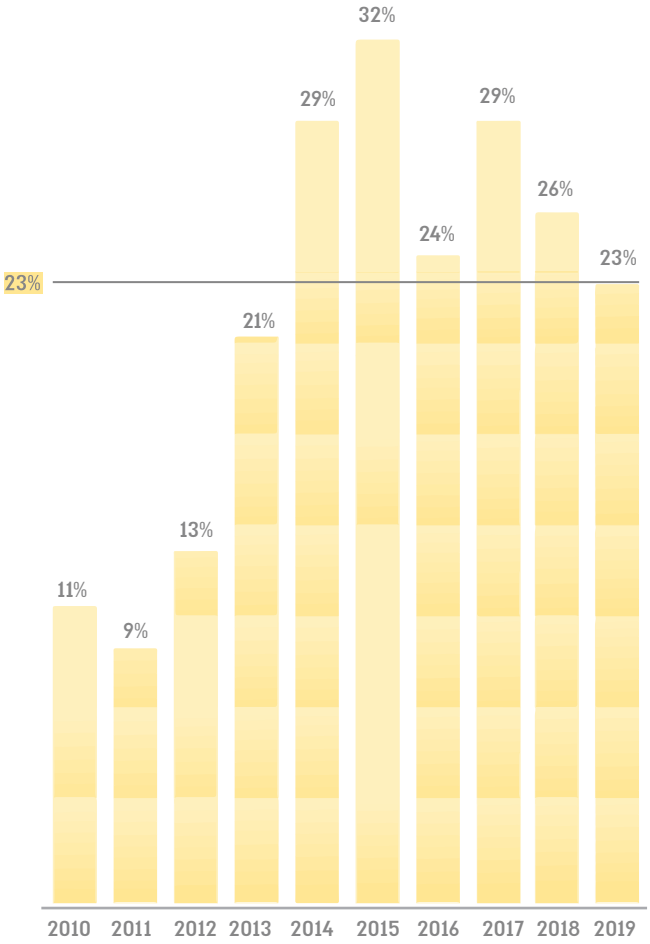
1. **An increase in the stock of CPI-linked-debt**-Over the past decade, CPI-linked debt increased approximately 3 percentage points of the total debt stock. CPI-linked debt comprised nearly 52% of total debt stock in 2019. The rise in CPI-linked stock is mostly due to the increase in net issuances of designated bonds, all of which are CPI-linked. Issuances of designated bonds come at the expense of issuances in the tradable market.

2. **A decrease in tradable debt issuance** - With the assumption of a steady deficit of 3%, the level of 'tolerance' (percentage of non-tradable funding out of total funding without a reduction in tradable and external financing) was 23%. With certain adjustments, the State can maintain a tolerance level of 25%[1].

The chart at right denotes the rate of non-tradable domestic debt issuance out of total funding in 2010-2019. As shown in the chart, since 2014 the average issue rate was above the tolerance threshold.

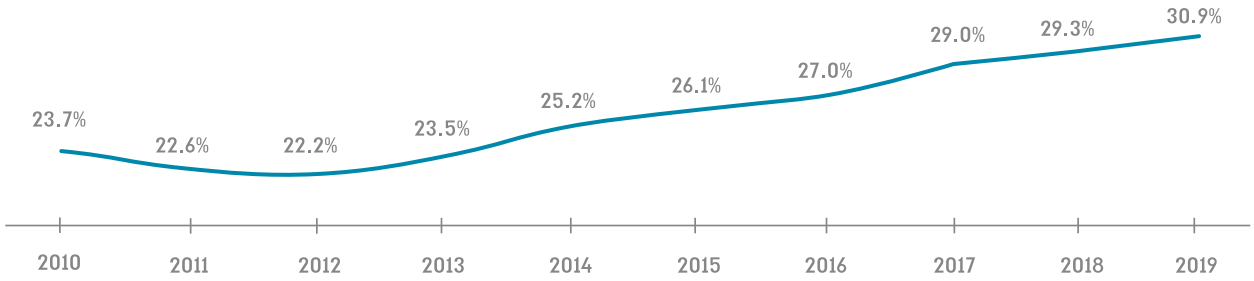
[1]Source: Increasing Certainty in Pension Savings Report (2015) "Babad committee"

Non Tradable Funding as a percentage of Total Funding in 2010-2019



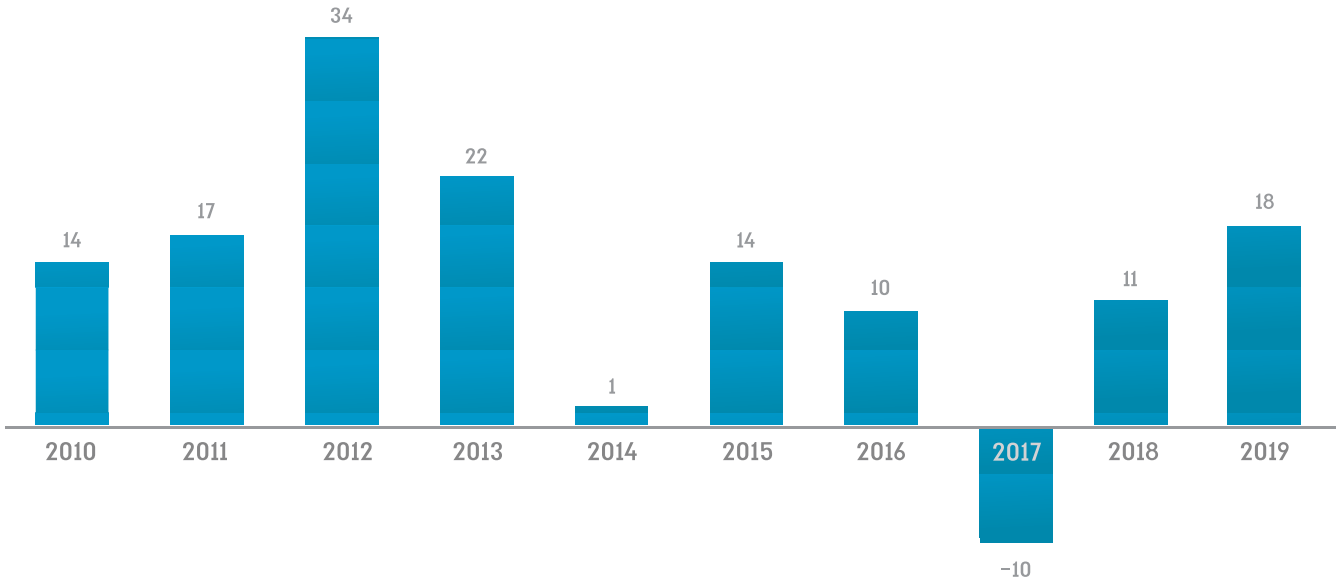
At the end of 2019, the stock of non-tradable domestic debt increased by approximately 10.3% to roughly NIS 255 billion. This constitutes approximately 30.9% of total debt and has been on a consistent upward trend since 2012. The stock of designated bonds issued to pension funds ("Arad" and "Meron") grew nearly 12.5% in 2019 and totaled roughly NIS 192.7 billion, compared to nearly NIS 171.3 billion in 2018.

Non Tradable Stock as a percentage of Total Stock in 2010-2019



The chart below shows the various issuances and repayments of tradable debt in 2010-2019. The increase in non-tradable debt led to an erosion in tradable debt issuance. This has an overall negative effect on the volume of tradable government bond issuances in the primary market, as well as the level of liquidity and tradability in the secondary market.

Net Issuance of Tradable Debt in 2010-2019 (NIS, billions)



3

Due to subsidies for designated bonds, there was an increase in interest expenses. Despite this, however, in 2019, there was a decrease in interest expenses of tradable debt. This is due to the high positive net funding in non-tradable debt and decline in market returns.

The subsidy for designated bonds at the end of 2019 was approximately NIS 8.2 billion. This was an increase of roughly 14% from nearly NIS 7.2 billion at the end of 2018.

8.2

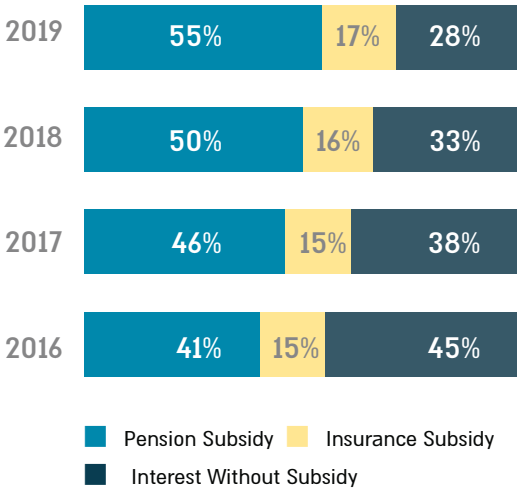
The subsidy for designated bonds at the end of 2019 was approximately NIS 8.2 billion

The Annual Budget Estimate Subsidy for Designated Bonds in 2016-2019 (NIS, millions)

Year	Pension Subsidy	Insurance Subsidy	Total	Percentage of Total Interest Payments for Designated Bonds
2016	3,829	1,368	5,197	57%
2017	4,652	1,558	6,210	65%
2018	5,416	1,765	7,181	69%
2019	**6,259**	**1,927**	**8,186**	74%

Interest payments for non-tradable bonds have three components: pension subsidies, insurance subsidies, and interest without subsidies in 2016-2019:

The estimated subsidy for designated bonds is based on the amount issued each year and the yield gap between these bonds and tradable CPI-linked government bonds with the same duration (market yield).



4 Designated bonds reduce debt management flexibility. The amount of designated bonds issued for pension funds consist of three main components:

- The funds' net accumulation
- The funds' yield during the examined period
- Redemption of designated bonds

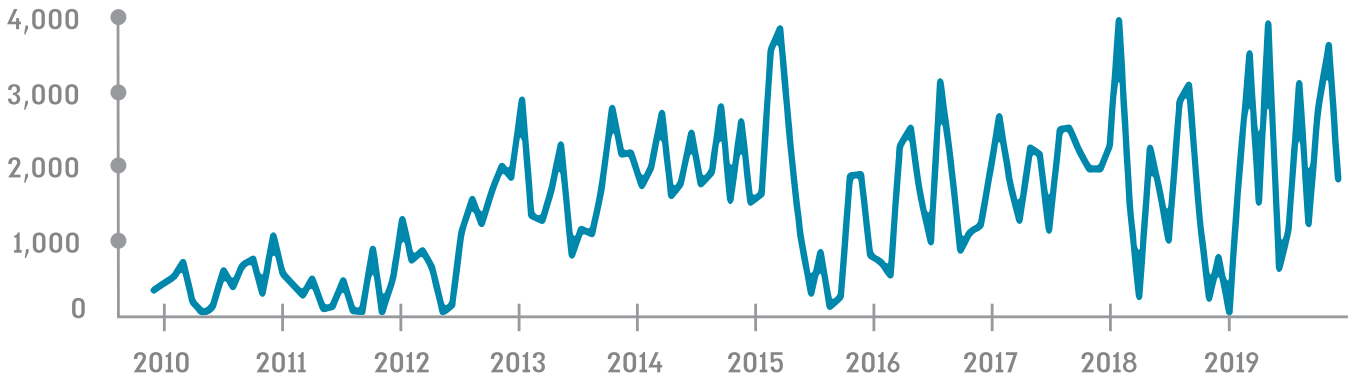
Designated bonds have a higher sensitivity to an increase in yield versus an increase in accumulation:

Factor	Issuance Increase (NIS, millions)
Increase of NIS 1 billion net accumulation	300
Yield increase of 1%	1,900

In addition, monthly issuances have high volatility, as demonstrated in the graph below. Since 2010, the average monthly issuance has been approximately NIS 1,431 million with a standard deviation of nearly NIS 983 million. Within a period of two months there may be a difference of NIS 3 billion (e.g., January and March 2019).

The combination of sensitivity to yield and high volatility for designated bonds makes it difficult to predict the amount of funding needed. This limits the flexibility of debt and cash management. In the first nine months of 2019, the average issuance of designated bonds for pension funds was roughly NIS 1.8 billion, but in the last three months of the year, the average was about NIS 2.7 billion. This increase required the GDMU to balance the overall funding needs by reducing funding from other sources.

Monthly Fund Raising in Designated Bonds in 2010-2019 (NIS, millions)



Global Debt

SOVEREIGN ISSUANCES

At the end of 2019, the stock of sovereign bonds denominated in foreign currency totaled approximately NIS 62 billion. Debt issuances in foreign currency in international markets serve a number of strategic goals:

- Establishing an additional source of funding to finance the government deficit
- Expanding the State of Israel's investor base
- Creating U.S. dollar and euro benchmarks that assist Israeli businesses in raising funds abroad

Sovereign Issuance

JANUARY 2020

In January 2020, a dual-tranche issuance in dollars was executed in the global market. The tranches consisted of a 10-year series amounting to USD 1 billion, with a yield of 2.550% and a spread of 68 basis points above the benchmark Treasury rate and a 30-year series amounting to USD 2 billion, with a yield of 3.509 % and a spread of 115 basis points above the benchmark Treasury rate. This issuance was characterized by having the lowest funding cost for the State of Israel in dollars, with over 400 investors from nearly 40 countries participating, and approximately USD 20 billion.

2020 This issuance was characterized by having the lowest funding cost for the State of Israel in dollars

Sovereign Issuance

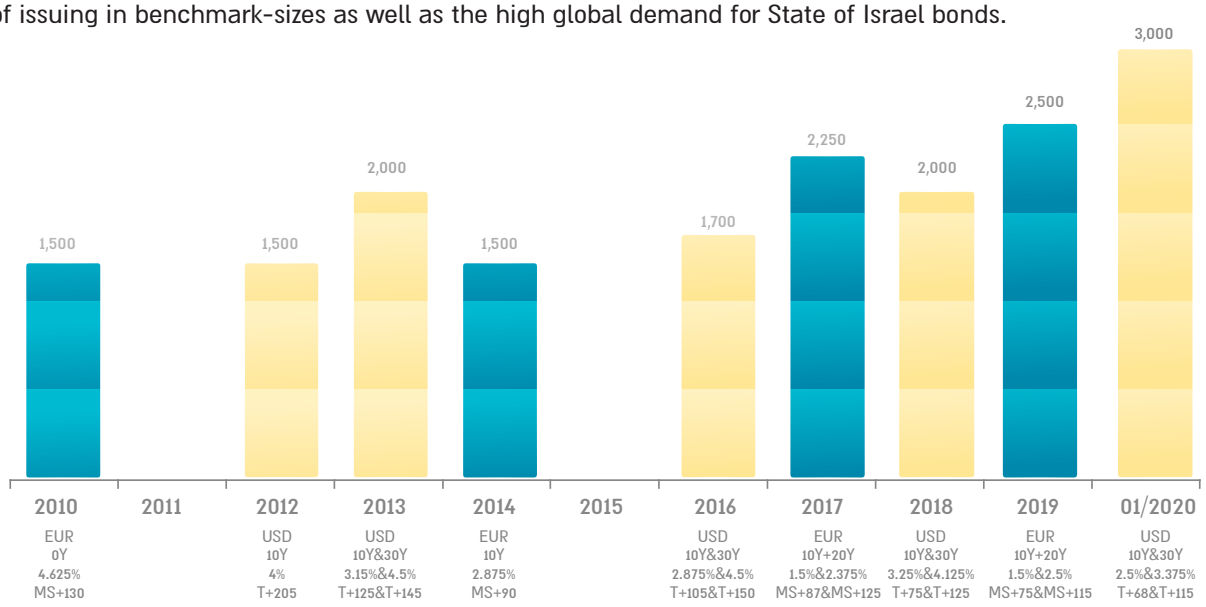
MARCH-APRIL 2020

At the end of March 2020, a three-tranche, dollar-denominated issuance was executed. The issue was comprised of: a USD 2 billion, 10-year series, at a yield of 2.75%; a USD 2 billion, 30-year series, at a yield of 3.875%; and for the first time, a USD 1 billion, 100-year series, at a yield of 4.5%. This transaction was characterized by having the highest investor demand for a State of Israel issuance.

In April 2020, for the first time, a public transaction was executed in the Asian markets. The issue consisted of a USD 5 billion, 40-year series, at a yield of 3.8%. This transaction was characterized by having very high investor demand, with over 300 high quality investors from nearly 30 countries in the order book.

Historical Sovereign Issuances (USD/EUR millions)

During 1995-2020, twenty-one sovereign issuances were executed in the global capital markets, including in the United States, Europe, and Japan. In recent years, issuance size has increased. This is due to both the policy of issuing in benchmark-sizes as well as the high global demand for State of Israel bonds.



Sovereign Issuance

JANUARY 2019

In January 2019, a dual-tranche issuance in euro was executed in the global market. The tranches consisted of a 10-year series amounting to EUR 1.25 billion, with a yield of 1.574% and a spread of 75 basis points above the benchmark rate (mid-swaps); and a 30-year series amounting to EUR 1.25 billion, with a yield of 2.557% and a spread of 115 basis points above the benchmark rate. This issuance received approximately EUR 15 billion of demand, attesting to the robust demand of investors for these bonds.

2019 **The dual-tranche received approximately EUR 15 billion of demand, attesting to the robust demand of investors for these bonds**

In 2019, a private placement was issued for EUR 500 million to a single European real money investor for a term of 50 years, Israel's longest-to-date, at a fixed interest of 2%

PRIVATE PLACEMENTS

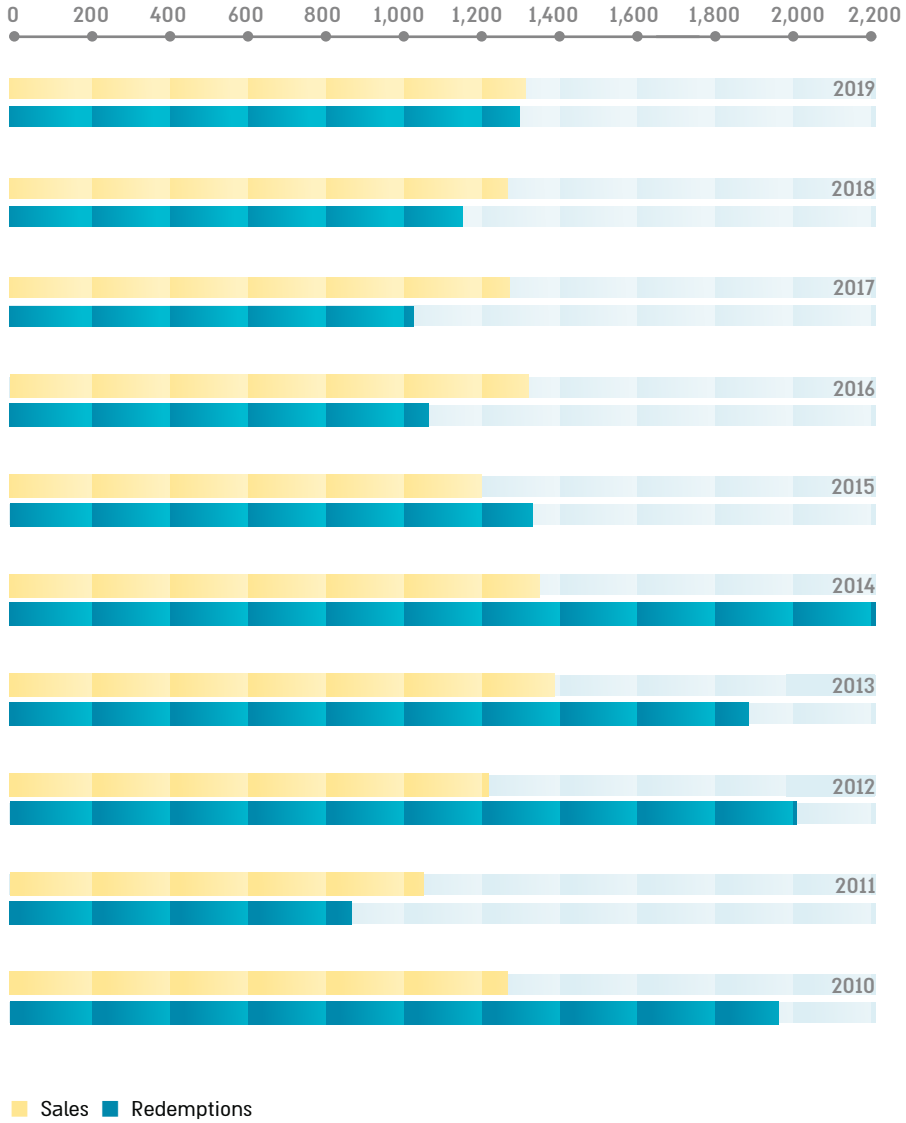
The stock of private issuances as of the end of 2019 totaled approximately NIS 5.25 billion. In 2019, two private placements were executed. The first private placement was issued for EUR 500 million to a single European real money investor for a term of 50 years, Israel's longest-to-date, at a fixed interest of 2%. The second private placement was for JPY 15 billion, issued to a strategic Japanese investor, for a term of 7 years at a fixed rate of 0.15%. These issuances were carried out under the EMTN shelf program for issues by the Israel government. Both deals in 2019 represent the investors' first-ever direct investments in Israel. In 2018, two private placements were executed. The first was for EUR 250 million, issued to an Asian sovereign wealth fund, for a term of three years at a fixed interest of 0.05%. The second private placement was for USD 400 million, issued to a central bank, for a term of two years with a floating interest rate of 3 months Libor + 0.26%. There is also an additional private placement outstanding that was issued in 1999, for GBP 100 million, maturing in 2034.

ISRAEL BONDS ORGANIZATION

At the end of 2019, the amount of bonds sold through the Development Corporation for Israel (State of Israel Bonds or Israel Bonds Organization) totaled roughly NIS 17.8 billion. The Development Corporation for Israel was established in the 1950s and is a platform for raising non-tradable debt in foreign currency. Over the years, the Israel Bonds organization has displayed a counter-cyclical nature; in years of recession or geopolitical shock, the amount of debt raised by the organization increases.

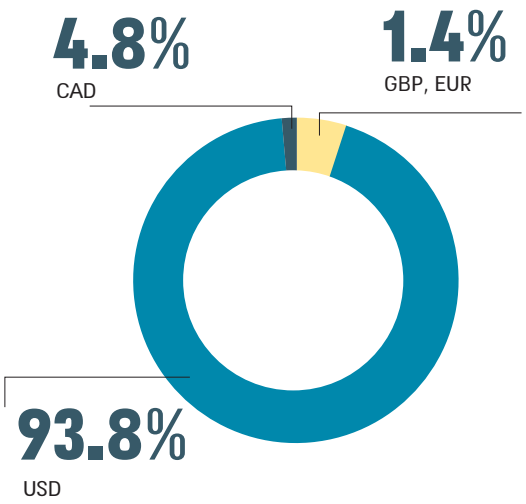
The Israel Bonds organization raises funds in order to assist with the government's financing needs. Its primary goal is to expand the base of investors and diversify government funding sources with retail customers.

Israel Bonds Organization, Sales and Redemptions in 2010-2019 (NIS, millions)

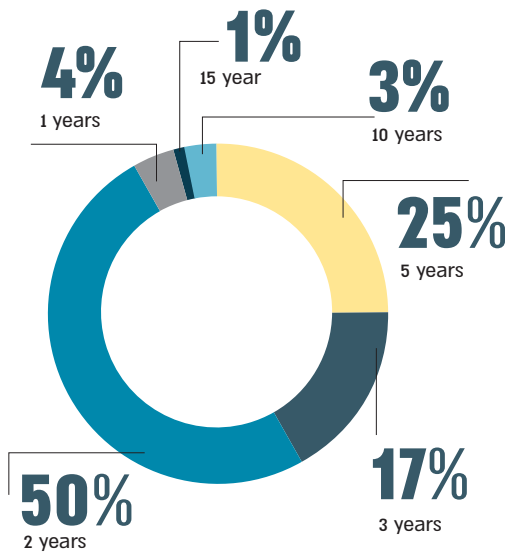


BONDS DEBT IN 2019

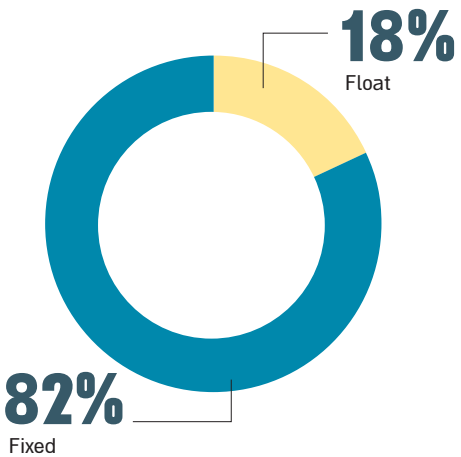
By Currency



By Time to Maturity



By Interest Rate



ISSUANCES GUARANTEED BY THE U.S. GOVERNMENT

At the end of 2019, the stock of bonds guaranteed by the U.S. government totaled about NIS 28.1 billion. In April 2003, the U.S. Congress approved a three-year program to provide guarantees to newly-issued Israeli Government debt abroad at a par value of USD 9 billion. As a guarantor of the debt, bonds issued under this program have a credit rating comparable to the United States. The yield at which the bonds were sold was only slightly higher than the yield on U.S. government bonds at the time.

The program has been extended by the U.S. government over the years. Most recently, in 2015, the program was extended through 2019, with an option of extending the program through 2020 as well (carry over year).

Under the guarantee program, in 2003 and 2004 (years with major deficits in the state budget) the State of Israel issued bonds with a par value of roughly USD 4.1 billion. The Israeli government has not utilized the guarantees program since November 2004. As of the end of 2019, the balance under the program totals approximately USD 3.8 billion.

The U.S. guarantees program serves as a financial "safety net" for the Israeli government. The U.S. guarantee framework supports the State of Israel's ability to raise money in international markets during times of emergency.

LOANS FROM FOREIGN GOVERNMENTS AND VARIOUS LENDERS

The balance of non-tradable debt is comprised of loans from foreign governments, international institutions, foreign banks, and bi-national funds. At the end of 2019, stock of non-tradable debt totaled roughly NIS 1.8 billion. At the end of 2019, outstanding loans constituted approximately 1.6% of total foreign currency debt.

THE STATE OF ISRAEL'S CREDIT RATING

	Moody's	S&P	Fitch
Rating	A1	AA-	A+
Outlook	Stable	Stable	Stable

In January and May 2020, S&P Global Ratings affirmed Israel's AA- credit rating and "stable" outlook. In April 2020, Moody's Investors Service affirmed Israel's A1 credit rating and updated its outlook to "stable". Also in April 2020, Fitch Ratings affirmed Israel's A+ credit rating and "stable" outlook.

Credit Rating Agencies Review Israel

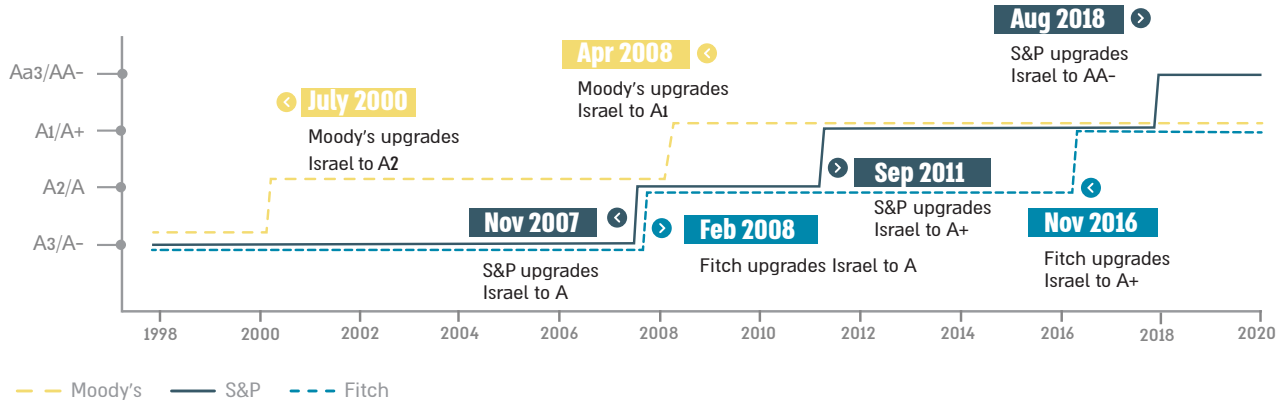
Strengths

- The ratings are supported by Israel's high-income, diversified economy, strong external balance sheet, and it's flexible.
- The ICT sector contributes over 8% of the gross value added, while scientific and technical activities add about 3%. This is underpinned by sizable civilian expenditure on research and development approaching 5% of GDP, which is the world's highest level.
- The economy has not faced recession in the past 15 years, and GDP in U.S. dollar terms has increased by about 65% since 2010, with the unemployment rate remaining at historical lows, below 4%.
- Israel has excellent access to capital markets both domestically and internationally. This has supported the government's efforts to diversify its funding base and lengthen the average debt maturity to over eight years. We note in particular recent international bond issuance, with maturities extending to 30 and 50 years on public and private placements, respectively.
- Export performance and the development of Israel's offshore natural gas fields, with significant export capacity, will support the country's current account position, with external surpluses projected to stay around 3% of GDP in the medium term.

Weaknesses

- The ratings are constrained by Israel's moderately high public debt burden and, in our view, significant security and geopolitical risks.
- Escalating tensions between the U.S. and Iran could lead to a higher risk of an open military conflict, involving Israel, with Iran and Iran-supported Hezbollah, among other militant groups operating in Lebanon and Syria.
- Excessive red tape, pronounced infrastructure gaps (including in (transport and housing), weak labor market participation, and poor skills of some social groups.
- One of the key challenges to monetary policy continues to be the real estate market. Real house prices have increased by over 100% since the end of 2007.
- Political consensus on containing public debt, which if not addressed due to political turbulence, might underminebusiness confidence dampening the growth outlook, and limit the government's fiscal space in case of shocks.

State of Israel - Credit Ratings



SECONDARY MARKET

The global economy grew 2.9% in 2019. This was somewhat slow compared to 3% in 2018 and 3.1% in 2017. The U.S. economy grew 2.3% in 2019. German growth fell to 0.6% in 2019 from 1.5% growth in 2018. China grew 6.1% in 2019, also lower than previous years.

The Israeli economy grew 3.5% in 2019. This is with a backdrop of two unsuccessful attempts at government formation. Additionally, 2019 ended with a budget deficit of 3.7%, 0.8% above target.

Financial conditions and political uncertainty have led several central banks to continue dovish monetary policy. The U.S. Federal Reserve reversed course following four rate increases in 2018 and lowered its rate three times in the second half of the year, from a range of 2.25%-2.5% to 1.50%-1.75%. The European Central Bank likewise lowered its rate on deposits for the first time since 2016, from -0.4% to -0.5%.

Throughout 2019, the Bank of Israel has kept its interest rate steady at 0.25% and inflation rose 0.6% on an annual basis. This was below the Bank of Israel's target range.

Following approximately a 6% drop in 2018, the S&P 500 index rose nearly 29% and the Dow-Jones increased roughly 22% in 2019. The German DAX index rose nearly 25.4% (bouncing back from an 18% decrease in 2018). The Japanese Nikkei rose approximately by 18% in 2019.

An upward trend characterized government bond markets. U.S. 10-year Treasury yields moved from roughly 2.69% to approximately 1.92%. The German Bund 10-year yield fell to a negative level, for the first time since 2016, and ended the year at -0.19%. For comparison, in 2018 the Bund yield was about 0.24%. The Italian 10-year government bond yield fell 133 basis points, following an increase of 73 basis points in 2018.

In 2019, the domestic Israeli government bond market was characterized by an increase in prices: CPI-linked bonds rose approximately 10%, while nominal fixed-coupon bonds rose nearly 9.65%. The 10-year nominal government bond yield fell from roughly 2.29% to about 0.96%, while the 10-year CPI-linked bond ended the year at -0.52%.

Israel's main stock index, the TA-35 index, increased approximately 15% in 2019, after dropping nearly 3% in 2018. The TA-125 index, rose about 21% in 2019. Corporate bonds increased by an average 8% in 2019, after falling roughly 1.8% in 2018.

The coronavirus pandemic began in China around December 2019. By the second half of February 2020, the coronavirus had spread to over 200 countries (as of April 2020). The pandemic response - followed by most countries - led to closures in business including manufacturing and led to a material decrease in trade as global demand subsided. These events necessitated considerable actions by central banks to sustain the financial systems to maintain continuous operation of the markets.

As a result of these actions and sustained uncertainty regarding the spread of the virus, stock markets dropped sharply around the world. The S&P 500 and DAX indexes fell nearly by 31% and 36%, respectively. In the Israeli market, TA-35 index fell by about 27% and government bonds declined by roughly 5%.

There were some signs of market recovery in April. The S&P rose such that it was only down nearly 10% on the year and the TA-35 climbed up so that it was down approximately 16% for 2020. By April, Israeli government bonds rose to be flat on the year.

The pandemic resulted also in high volatility for commodity markets, especially the oil market. The decrease in demand lead to a trade war between Russia and Saudi Arabia exacerbated a sharp drop in oil prices that reached unprecedented negative levels around mid-April.

In September 2019, FTSE-Russell approved Israel's inclusion into its World Government Bond Index (WGBI) index for April 2020. Due to the uncertainty and high volatility stemming from the pandemic, the inclusion was postponed to May 2020.

MARKET MAKING IN GOVERNMENT BONDS

Market Making reform came into effect in 2006 with several objectives:

Developing an efficient and competitive government bonds market

Introduction of international investors

Increase of demand for government bonds

Reduction of financing costs

Primary dealers are required to comply with primary market and secondary market obligations. When in compliance with these requirements, primary dealers are entitled to benefits, such as:

- Exclusive issuance auctions for primary dealers
- Participating in non-competitive auctions ("green-shoe")
- Receiving access to the government bonds lending facility
- Eligibility to participate as counterparties in hedging transactions

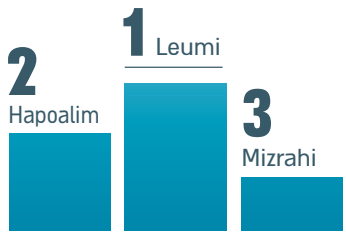
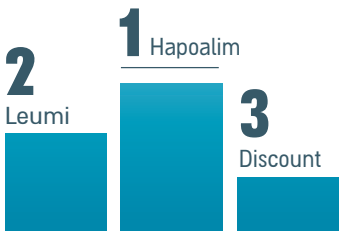
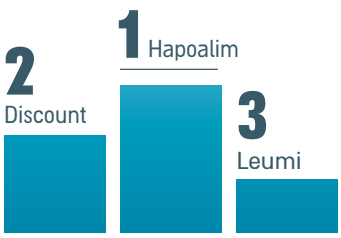
As of December 2019, there were 13 primary dealers in government bonds, seven of which are international banks. During the 4th quarter JP Morgan was appointed as a primary dealer.

PRIMARY MARKET RANKING

Primary market ranking is based on the volume of purchases in government bond auctions during the year.

SECONDARY MARKET RANKING

Secondary market ranking is based on trading and quoting activity on MTS, (the trading platform exclusively for primary dealers) in each asset class (non CPI-linked and CPI-linked bonds). Secondary market rankings are calculated weekly, monthly, quarterly, and annually. Greenshoe allocations are determined based on weekly rankings.

	Yearly Primary Market Ranking*	Yearly Secondary Market Ranking - Nominal	Yearly Secondary Market Ranking - CPI-linked
			
01	Bank Leumi	Bank Hapoalim	Bank Hapoalim
02	Bank Hapoalim	Bank Leumi	Discount Bank
03	Mizrahi Bank	Discount Bank	Bank Leumi
04	Goldman Sachs	Mizrahi Bank	Mizrahi Bank
05	Merrill Lynch	Goldman Sachs	Goldman Sachs
06	Discount Bank	Barclays Capital	Citibank
07	Barclays Capital	FIBI	Barclays Capital
08	Citibank	Citibank	FIBI
09	Union Bank	Union Bank	Union Bank
10	BNP Paribas	Merrill Lynch	Merrill Lynch
11	FIBI	Deutsche Bank	Deutsche Bank
12	Deutsche Bank	BNP Paribas	BNP Paribas

■ Bank of Jerusalem nomination as primary dealer in Israeli government bonds ended during the first quarter.

*NIS 1 of T-Bill is calculated as NIS 0.50.

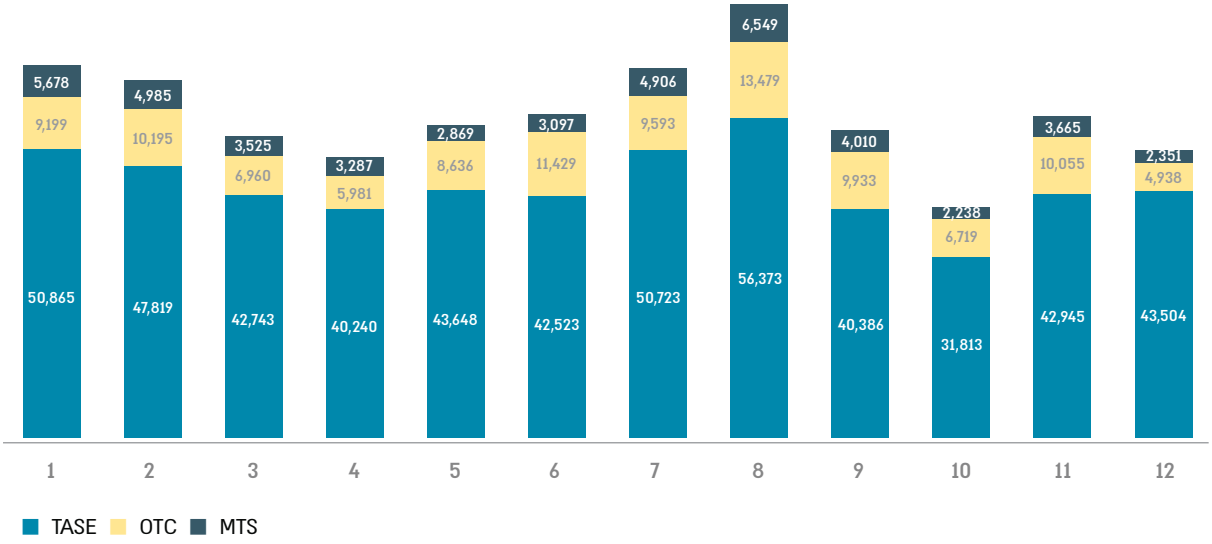
TRADING VOLUMES IN GOVERNMENT BONDS

Trade in government bonds take place on several exchanges: the Tel Aviv Stock Exchange (TASE), MTS (only primary dealers in Israeli government bonds may participate), as well as over-the-counter (OTC) trading.

Trading volumes on the TASE reached NIS 534 billion in 2019 (compared with NIS 537 billion in 2018). Volumes on MTS decreased from approximately NIS 63 in 2018 to 47 billion in 2019. OTC trading reached NIS 107 billion.

Trading on the MTS platform takes place Monday-Thursday.

Trading Volumes of Government Bonds in 2019 (NIS, millions)



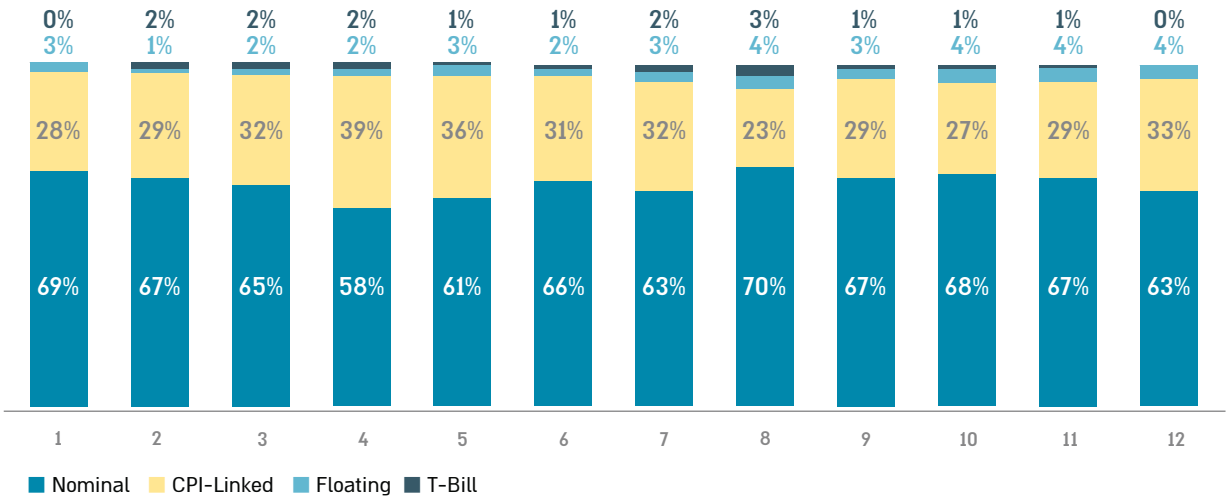
BREAKDOWN OF TRADING BY SEGMENTS

As in previous years, in 2019 government bond trading was concentrated in the nominal fixed-coupon segment.

Ratio between different segments in 2019:

Nominal fixed-coupon: 65.42% of trade (2018 – 67.29%). CPI-linked: 30.38% of trade (2018 - 30.14%). Floating rate: 2.84% of trade (2018 – 2.57%). T-Bills: 1.36% of trade.

Breakdown of Trading Turnover in Different Segments in 2019



Distribution of trading volumes between the various exchanges:

TASE
77.57% of trade (2018 – 74.48%).

MTS
6.86% of trade (2018 – 8.79%).

OTC
15.57% of trade (2018 – 16.73%).

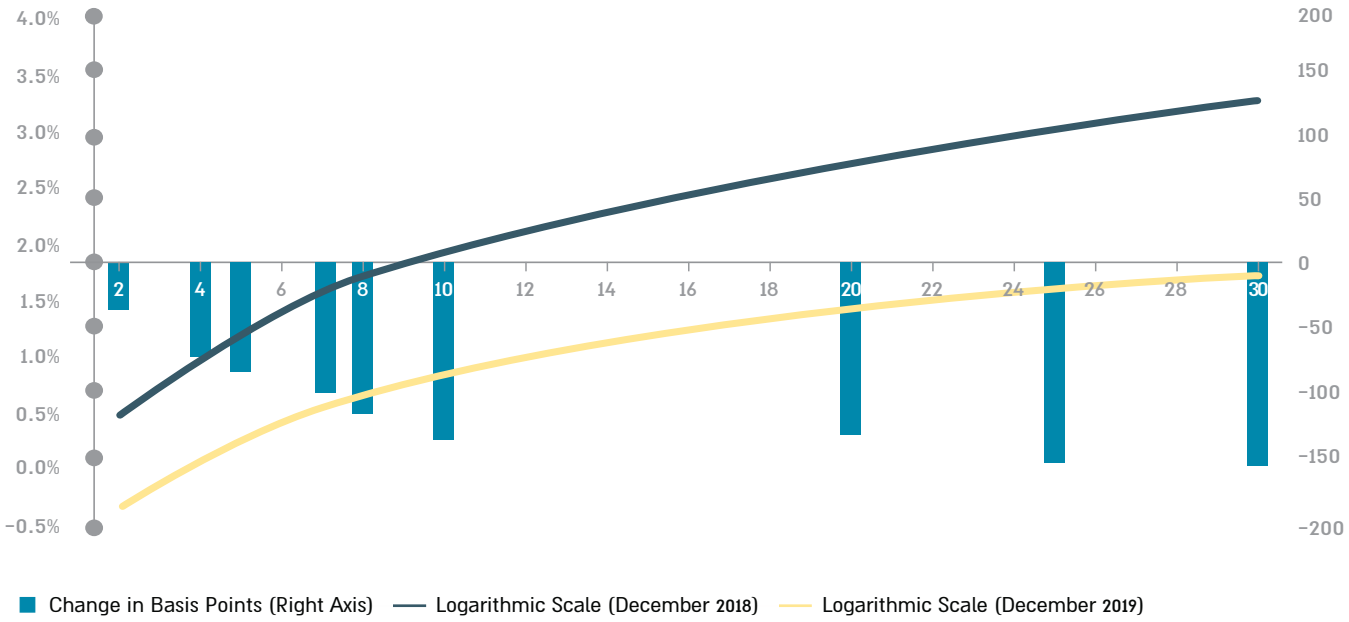
*for 2019 only OTC transaction which were reported by TASE were taken into account.

Trading volumes of government bonds in 2019 reached a daily average of NIS 2.88 billion. In 2018, daily average trading was NIS 2.98 billion.

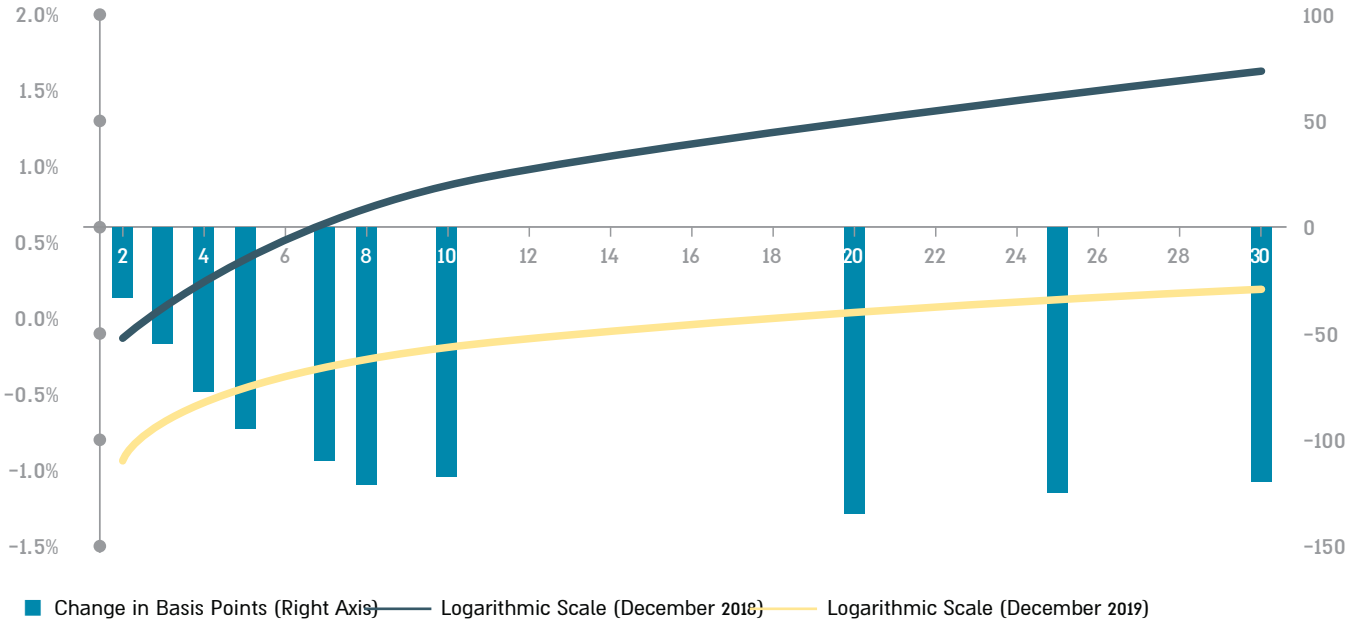
YIELD CURVE

CPI-linked and nominal fixed-coupon yield curves at the end of 2019 and spreads from the 2018 yields.

Nominal Curve



CPI Curve



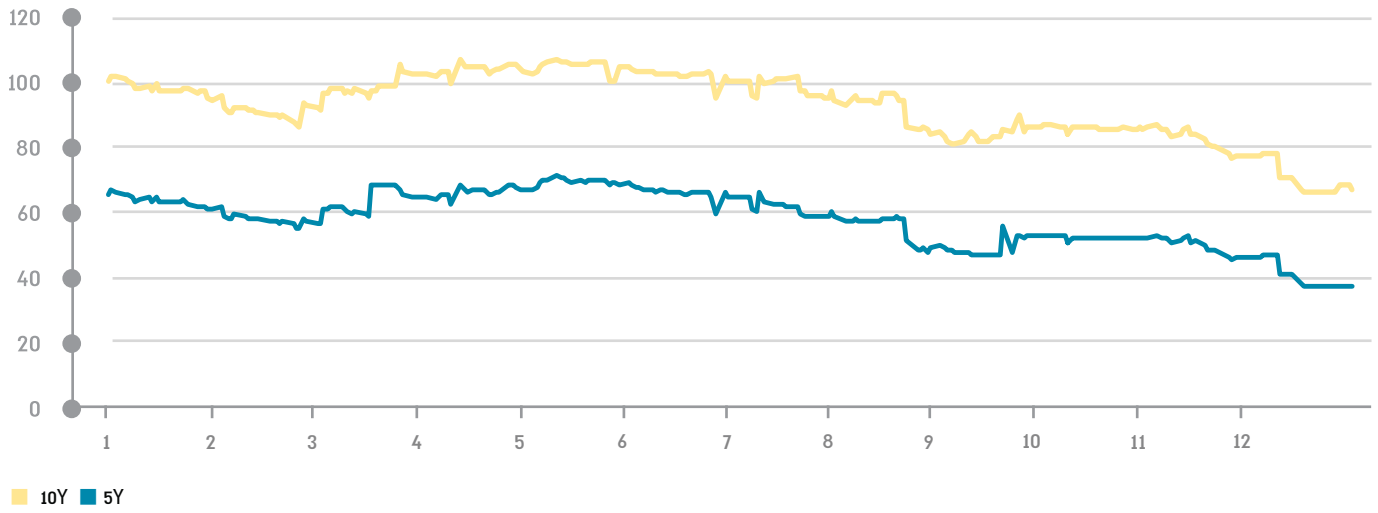
DEVELOPMENT OF THE CDS SPREADS

Credit Default Swap (CDS) transactions are agreements that enable two parties to transfer a third party's credit risk between them. In practice, such transactions represent the sale of bankruptcy insurance.

CDS spreads are generally regarded as an indication of an investor's confidence in the third party's redemption ability, which serves as the underlying asset for the transaction.

The graph below shows CDS spreads of the state of Israel in 2019:

CDS



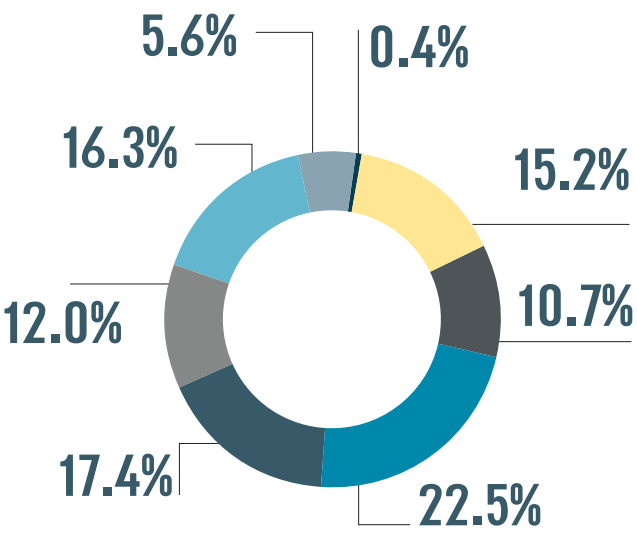
BOND LENDING FACILITY

The bond lending facility began operating in September 2006 as part of the market making reform.
The Ministry of Finance, along with the Tel-Aviv Stock Exchange Clearing House established a bond lending facility that allows primary dealers to borrow government bonds.

Those interested in borrowing bonds (up to NIS 1.5 billion per primary dealer) may contact the Tel-Aviv Stock Exchange Clearing House to borrow the bonds in return for interest-bearing cash collateral.
In 2019, this facility lent between NIS 0.8 and 4.6 billion in market value of borrowed bonds. This is less than the range of NIS 2.5 and 5 billion in 2018.

BORROWING (NIS, millions)

Government Bonds Holdings in 2019



BREAKDOWN OF HOLDINGS IN TRADABLE GOVERNMENT BONDS

Significant Changes:

- The weight of pension and provident fund holdings increased to 39.9% in 2019 from 38.3% in 2018.
- The weight of foreign investors' holdings in government bonds decreased to 5.6% in 2019 from 6.7% in 2018.
- The Bank of Israel's share of holdings in domestic tradable government bonds continued to decline, to a level of 0.4% in 2019.

Public Bank of Israel Foreign investors Insurance companies
Banks Pension funds Provident and education funds Mutual funds

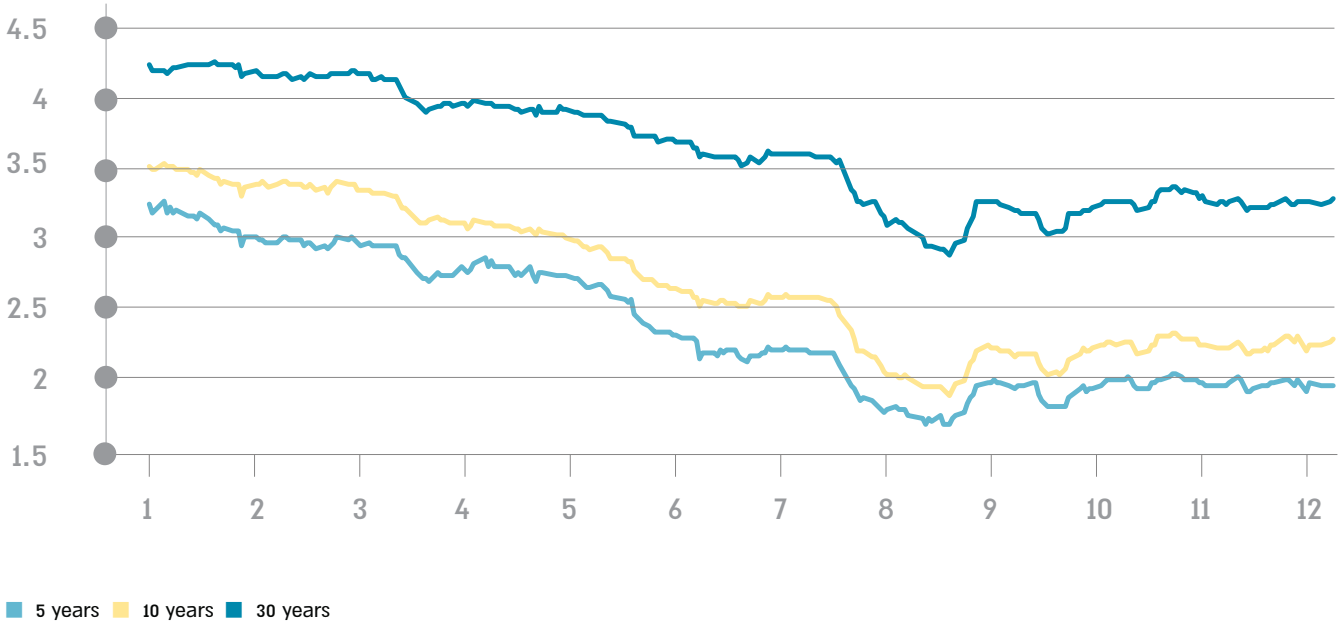
Year	Total Listed Capital (NIS (billions	Public	Mutual funds	Provident and education funds	Pension funds	Banks	Insurance companies	Foreign investors	Bank of Israel
2019	531.4	15.2	10.7	22.5	17.4	12.0	16.3	5.6	0.4
2018	483.9	15.0	10.8	21.9	16.4	11.8	16.5	6.7	0.9
2017	491.9	14.9	10.5	22.1	17.1	12.6	15.9	5.6	1.3
2016	498.7	15.2	11.4	20.7	16.1	16.0	13.7	5.2	1.7
2015	502.7	17.1	13.5	20.0	14.9	14.0	13.0	5.5	2.0
2014	469.2	18.5	13.6	20.1	15.4	11.9	12.6	5.5	2.4
2013	480.7	19.9	11.8	20.3	15.9	13.0	12.3	3.7	3.1
2012	459.5	21.7	9.6	19.8	15.5	12.8	11.2	5.6	3.7
2011	408.8	22.3	8.5	19.3	14.9	14.1	9.8	6.3	4.8
2010	388.7	24.2	13.2	18.8	13.3	12.8	9.7	3.0	5.1
2009	367.5	26.4	13.0	17.9	12.3	12.9	9.3	2.7	5.5
2008	316.8	28.2	11.3	20.2	12.6	14.5	10.1	2.2	0.8

Source: Bank of Israel, 2019, breakdown of tradable government bond holdings (as of 23.1.2020)

BENCHMARK

The following graph denotes yields of Israeli bonds, denominated in foreign currency, maturing in 5, 10, and 30 years. These yields form a benchmark curve illustrating the Israeli economy's risk in dollars and euros. This benchmark curve helps Israeli companies find efficient pricing when looking to issue debt abroad.

Yields of Sovereign Bonds in Foreign Currency in 2019



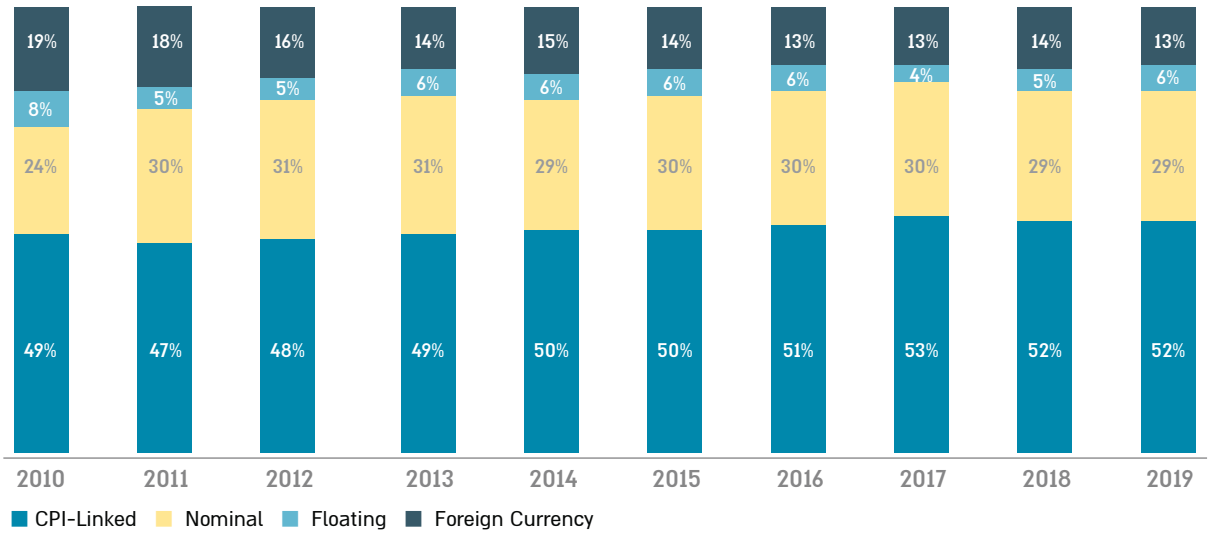
DEBT PORTFOLIO

DEBT PORTFOLIO

In 2019, government debt increased by approximately 4.4% totaling nearly NIS 823.2 billion. In 2018, government debt stood at roughly NIS 788.3 billion. The primary reason for the nominal increase stems from a net funding of approximately NIS 46 billion. Partially offsetting the rise in debt were: a significant appreciation of the shekel against the US dollar and euro during 2019 (affecting foreign debt) and a continuous decline in accrued interest on outstanding government debt.

As illustrated in the chart below, over the past decade, the portion of external debt (relative to total debt) has been decreasing. This year, CPI-linked remained stable at approximately 52%. This was a result of greater fixed rate issuance in the tradable domestic market and a low inflation rate.

Structure of the Government Debt in 2010-2019



DEBT-to-GDP RATIO

The debt-to-GDP ratio is a major indicator for determining the state's credit rating and financial stability.

Israel has substantially decreased this ratio relative to other advanced countries over the past decade.

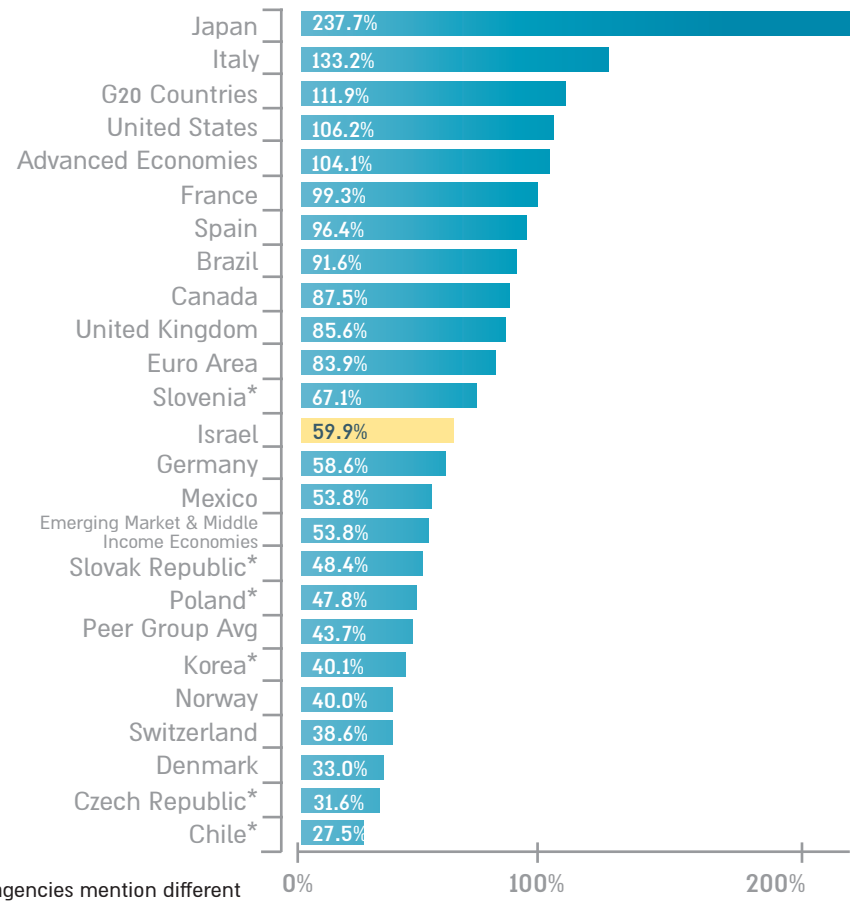
The long-standing trend of reducing debt-to-GDP is a direct result of prudent economic policy. Policy makers understand that a reduction in the ratio contributes to the country's ongoing financial strength. This is especially noteworthy when compared to other developed countries, which have seen significant increases stemming from the financial crisis.

The public debt-to-GDP ratio (includes debt of local authorities) decreased by 0.9% to 60.0 %, to the Maastricht treaty target.

The main reasons for the decrease in the debt-to-GDP ratio were macro-economic including high growth in the Israeli economy and market-related such as the appreciation of the shekel against the US dollar and euro.

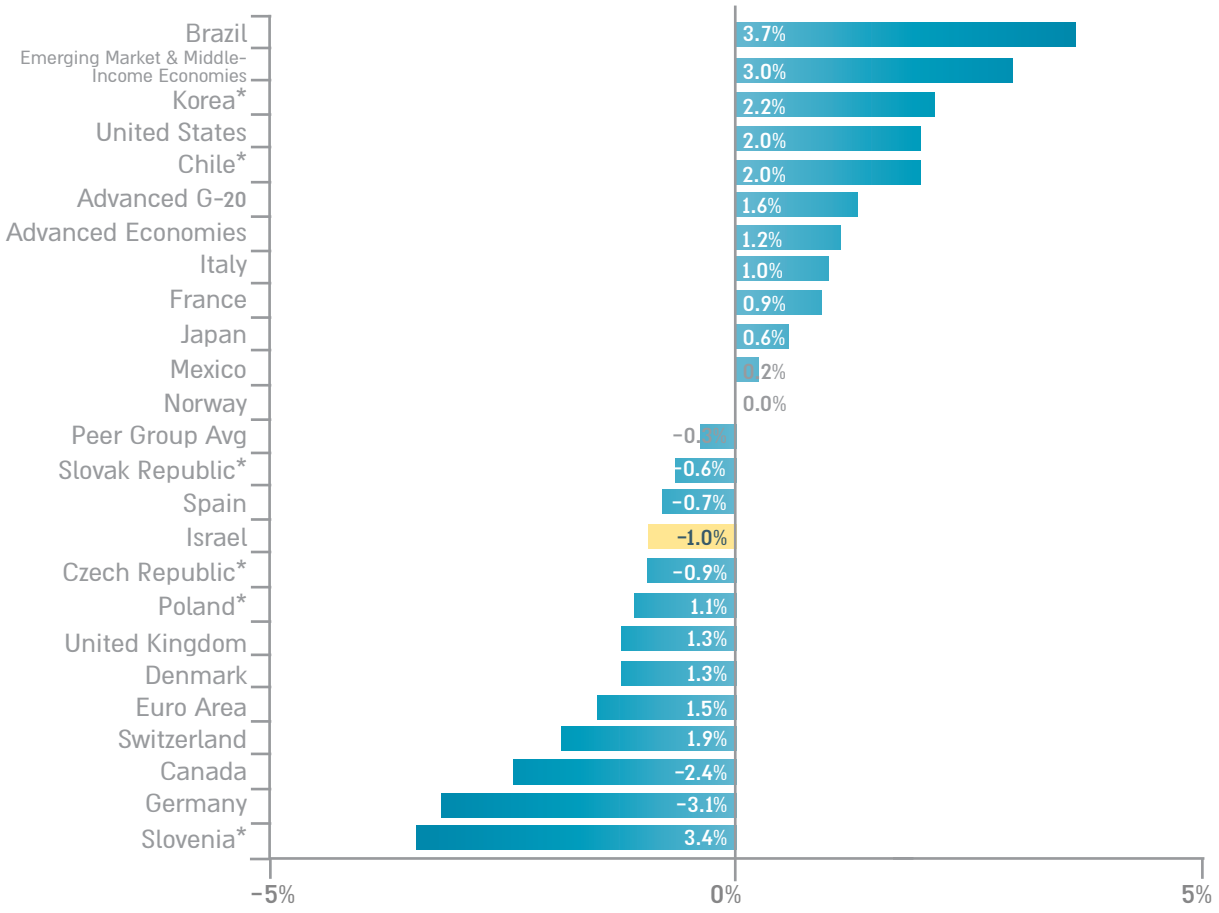
Source: Ministry of Finance and Bank of Israel, Gross domestic product in 2019 according to the National Accounts of the Central Bureau of Statistics February 2020. Other countries - Fiscal Monitor, October 2019

Ratio of Public Debt-To-GDP in 2019

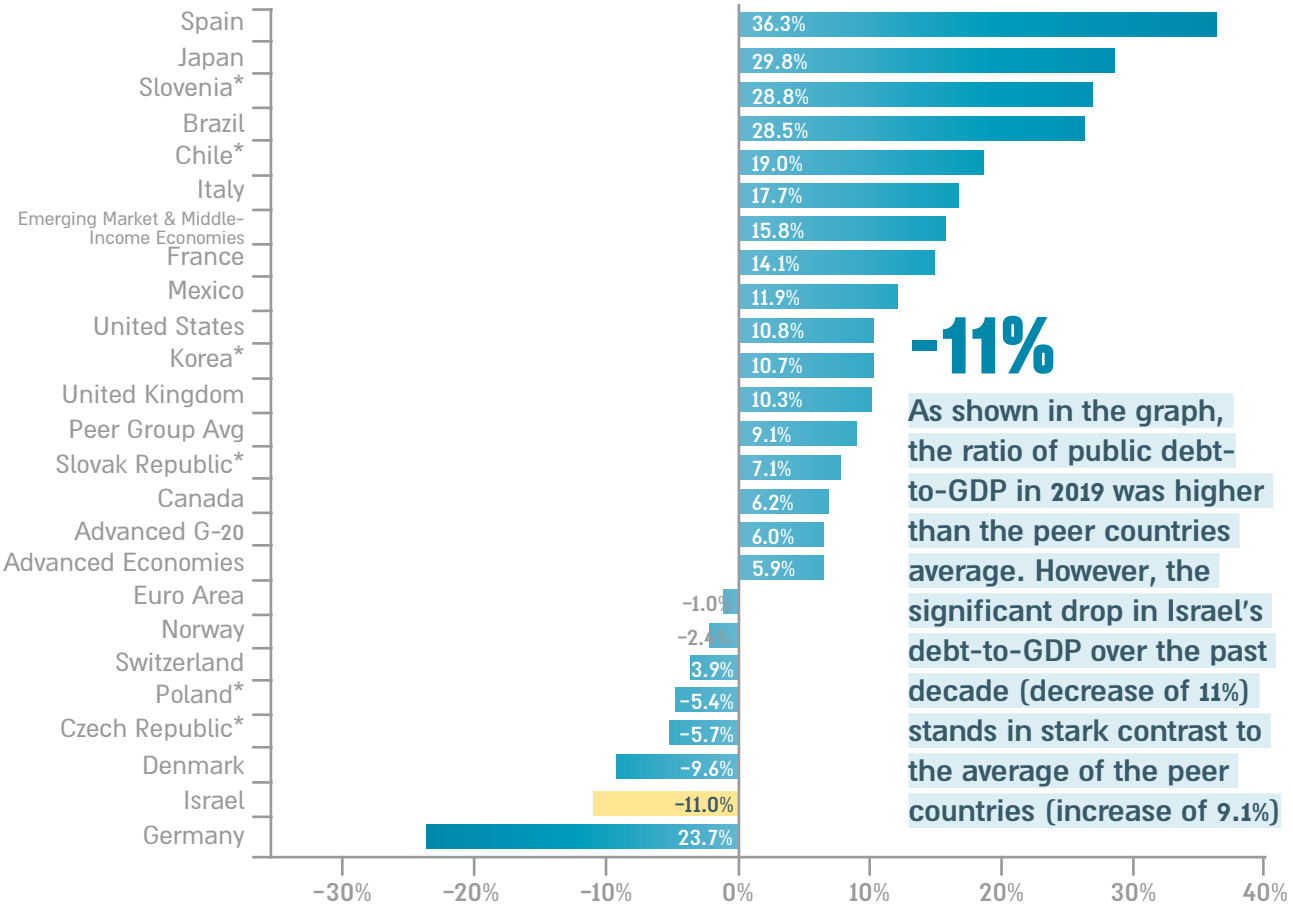


*When referring to the State of Israel's peer countries, rating agencies mention different countries such as Slovenia, Chile, Slovakia, South Korea, Poland and Czech Republic.

Change in the Ratio of Public Debt-to-GDP between 2018 and 2019



Change in the Ratio of Public Debt-to-GDP between 2010 and 2019



-11%

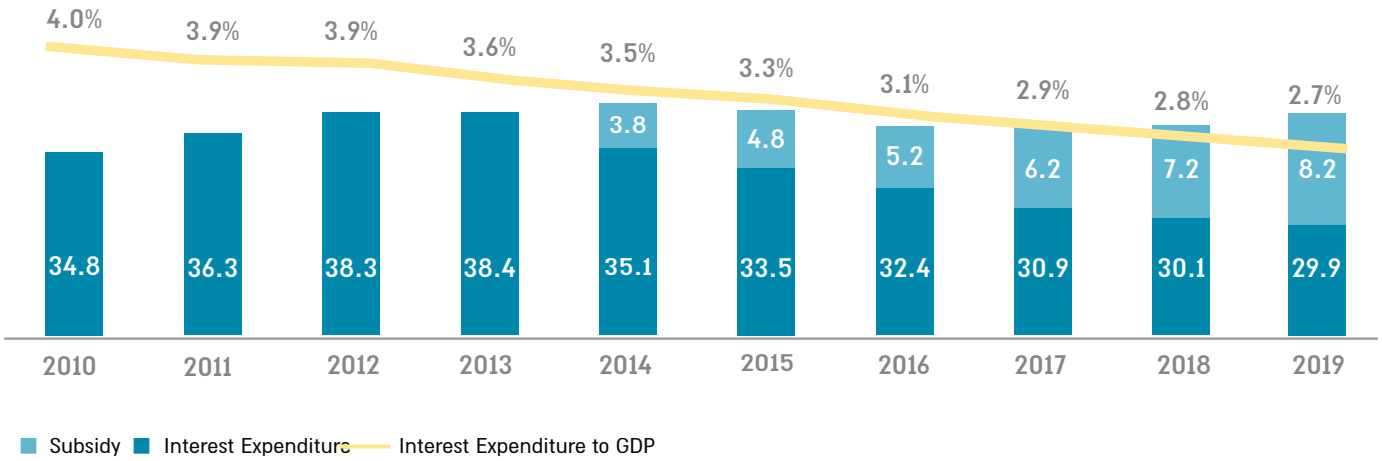
As shown in the graph, the ratio of public debt-to-GDP in 2019 was higher than the peer countries average. However, the significant drop in Israel's debt-to-GDP over the past decade (decrease of 11%) stands in stark contrast to the average of the peer countries (increase of 9.1%)

INTEREST EXPENSES

Interest expenses amounted to NIS 38.1 billion in 2019. The rate of interest expenses, relative to GDP, fell to 2.7% in 2019 from 2.8% in 2018. Interest expenses have been steadily declining over the past decade. In recent years, interest payments on domestic tradable debt declined nominally. At the same time, interest payments on subsidies for non-tradable bonds rose to NIS 8.2 billion in 2019, as illustrated in the chart below.

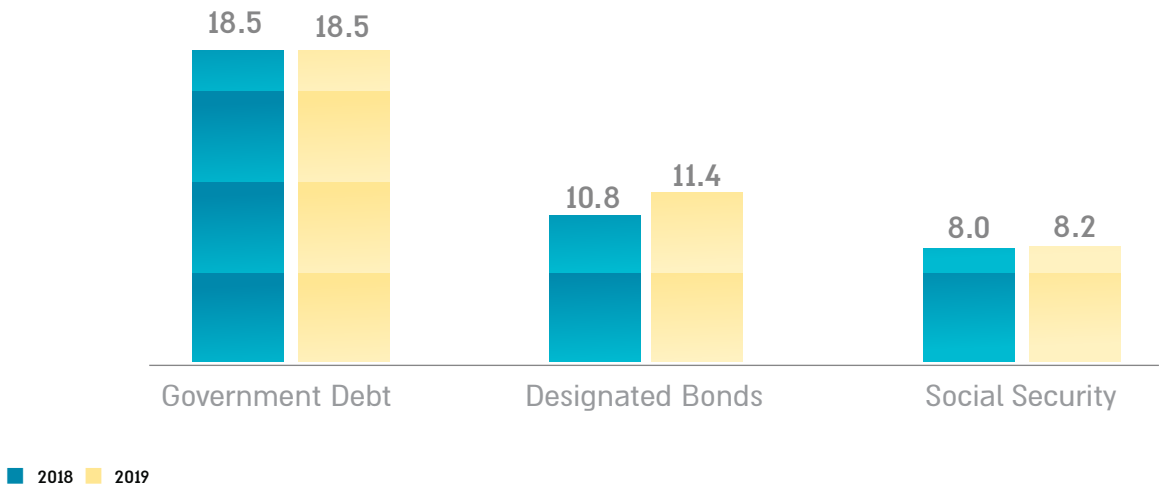
The rate of interest expenses, relative to GDP, fell to 2.7% in 2019 from 2.8% in 2018

Interest Expenses Relative to GDP in 2010-2019 (NIS billions, percentage)



The graph below presents a breakdown of interest expenses for government debt, designated bonds, and national insurance for 2018 and 2019. The decrease in interest expenses, relative to government debt, results from refinancing at lower funding costs. Furthermore, interest expenses on the designated bonds and national insurance increased NIS 0.6 and NIS 0.2 billion, respectively, due to positive net funding and a positive inflation rate.

Breakdown of Interest Expenses between 2018 and 2019 (NIS, billions)



GOVERNMENT DEBT RISK MANAGEMENT

The top-line risks for the government debt portfolio are: refinancing risk; liquidity risk; market risk, and credit risk. Risk management is carried out in accordance with organized policy and as part of the long-term strategic plan for managing the government's debt, treasury, and liquidity. The Ministry of Finance's risk management strategy relies on sophisticated models, scenarios and simulations that help minimize economic and budgetary risks. Designated systems for government debt risk management are utilized to this end.

The following dashboard indicators represent the various risks of managing the government's debt. Each indicator presents ten-year history and indicates the maximum, minimum, and average metric for that period. The arrow points to the current figure and the color of the panel represents the desired direction.

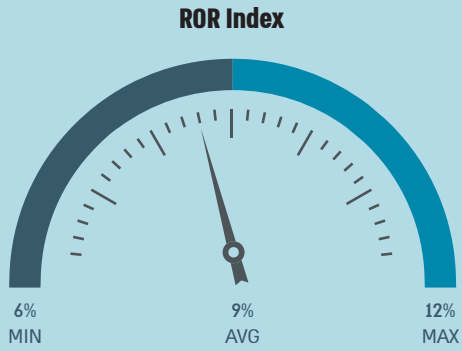
KEY FINANCIAL RISKS:

1

Refinancing risk - a situation whereby the state is unable to uphold its obligations to pay past debts and is, in effect, approaching insolvency. Reliable debt-raising of consistent amounts leads to higher confidence for both decision-makers and capital market operators. It often also leads to higher bid-to-cover ratios which enable more efficient debt refinancing - thus reducing refinancing risk. Issuing for longer maturities extends the government's debt ATM (average time to maturity) and further helps reduce the refinance risk.

Refinancing risk is projected by the following measures:

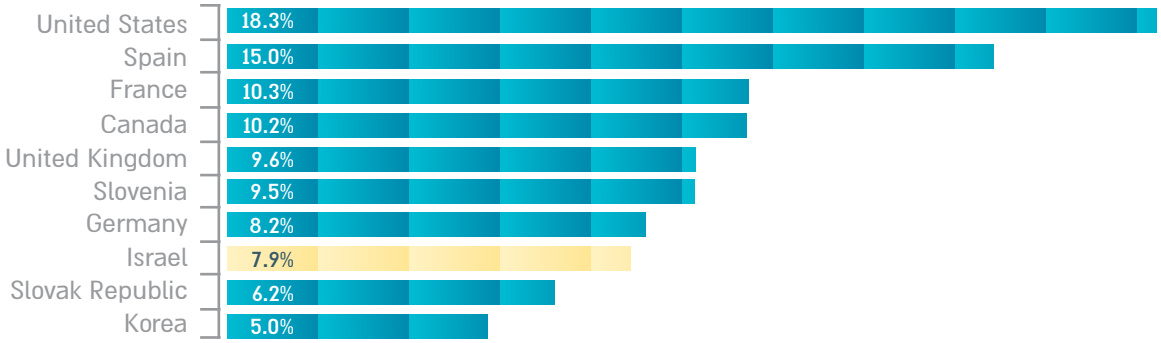
- Examining the extent of short-term debt (debt that must be redeemed over the upcoming year) relative to total debt (rollover ratio). According to the risk management policy, this should remain within the range of 8%-12%.



As of the end of 2019, this index was in the lower end of the target range at 7.9%. This was due to extending the government debt ATM.

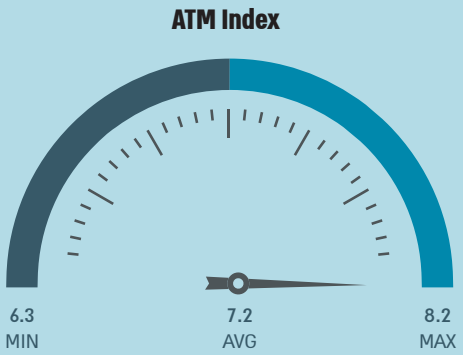
The following is a global comparison of the rollover ratio (ROR) as compared to selected countries.

ROR Index - Global Comparison



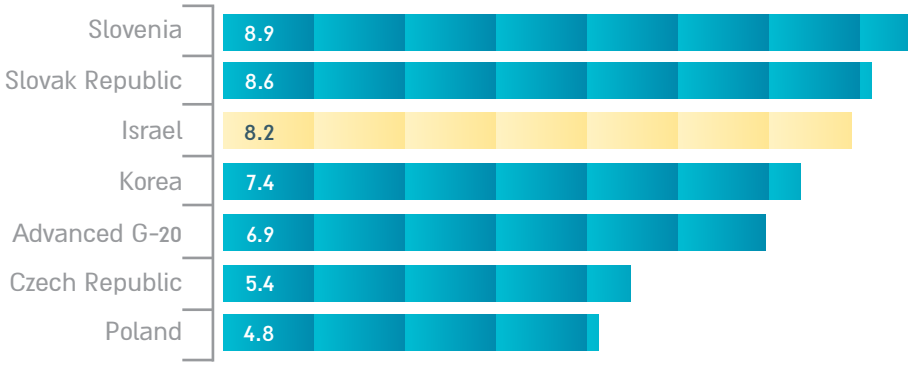
■ Average time to maturity - This index reflects the average life of the debt portfolio, by the weighted average of principal repayment dates. Since this index is only an average, it is incomplete when estimating the risk. We therefore use it in combination with the ROR for projecting refinancing risk one to three years ahead. Refinancing risk is reduced by maintaining a policy in which consistent amounts are issued for reliable periods of time such as 3, 5, 10 and 30 years (benchmarks), with the aim of smoothing the redemptions curve. As illustrated in the chart below, the debt portfolio's ATM has been significantly extended and is at its highest level in the past 10 years.

The debt portfolio's ATM has been significantly extended and is at its highest level in the past 10 years



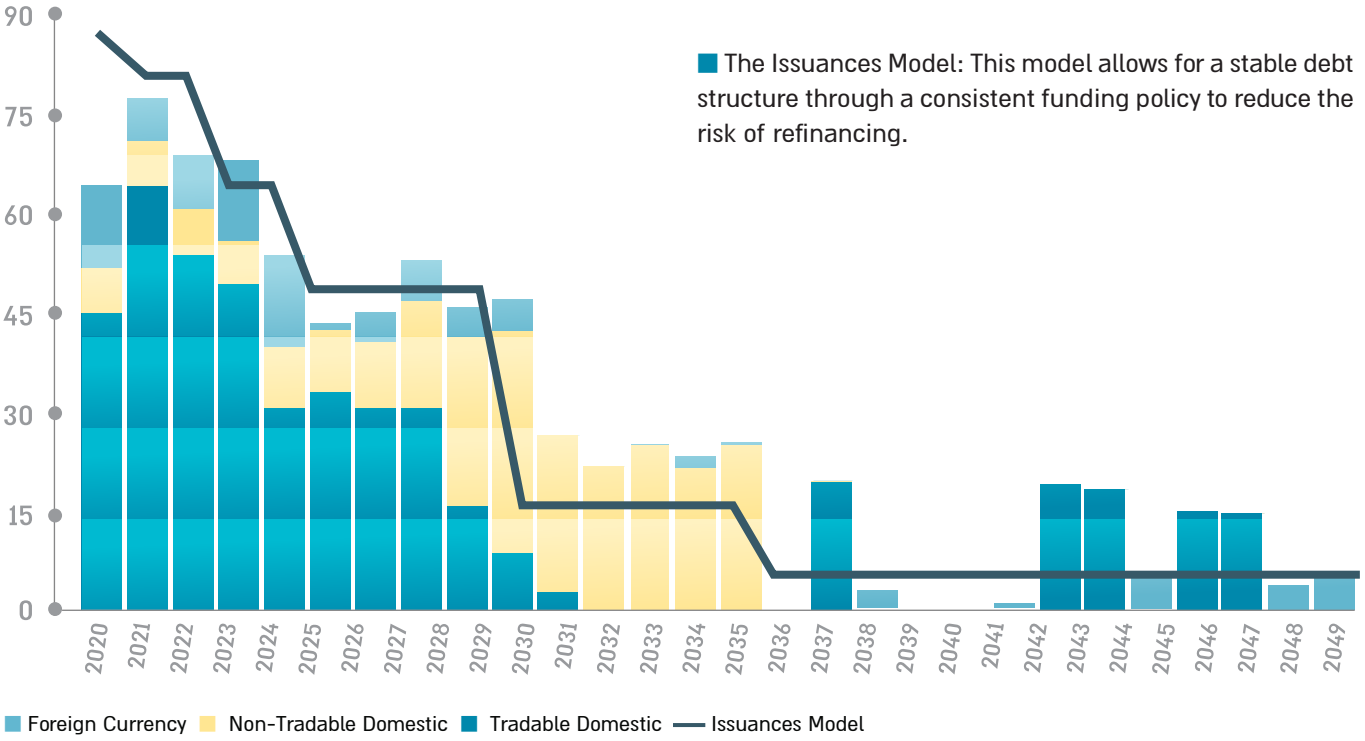
When determining a target ATM for the debt portfolio, a comparative analysis was conducted. This analysis compared Israel with other countries, examined various global macroeconomic trends and identified countries with similar characteristics. As seen in the graph, the ATM index of the debt portfolio is higher than most of the peer countries and other developed countries[2].

ATM Index - Global Comparison



[2]Source: Ministry of Finance and Bank of Israel, other countries - Fiscal Monitor, October 2019

SEVERAL MODELS ARE USED TO MANAGE THIS RISK:



■ The Issuances Model: This model allows for a stable debt structure through a consistent funding policy to reduce the risk of refinancing.

■ New Series Model: this model plans new bond series in advance in order to minimize monthly redemptions and volatility in the interest rate budget.

■ Continuous examination of main indicators such as ATM and ROR as mentioned above.

2 **Liquidity Risk** - the risk that existing sources of financing are not large enough to meet the state's needs. Estimation and management of this risk are measured through models, scenario analysis (central scenario, stress scenarios and extreme scenarios) and simulations for daily monitoring. Liquidity instruments are also used. These include short-term bonds, switch auctions, and buyback auctions. The State of Israel maintains a liquidity cushion, in accordance with its risk management strategy, while examining the deficit between income and expenses. A minimum cushion is always held to deal with various scenarios.

3 **Market Risks** - the risks of changes in government debt and interest budget as a result of market factor fluctuations (CPI, interest and exchange rates). Estimates for these risks are carried out via sensitivity analysis. Its management is carried out through hedging exposure with various financial instruments (such as forward transactions).

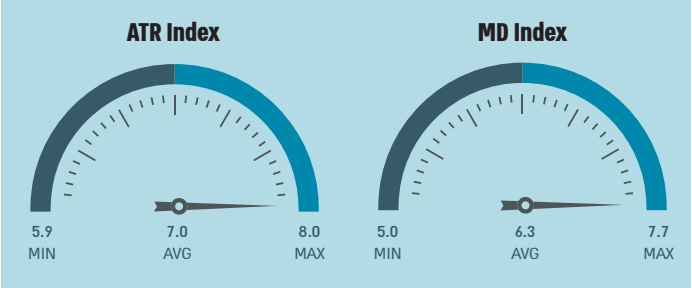
This risk is estimated using the following indices:

■ Modified Duration is an index that helps determine the influence of the interest rate on the debt's market value. The dashboard shows the total duration of government debt increased to 7.7 from 6.9 in 2018.

■ Average Time to Refixing (ATR): is an index that examines interest risk to an issuer. The dashboard below shows that most of the government debt is at a fixed interest rate, so ATR is similar to ATM and was 8.0 as of the end of 2019.

■ Exposure to Consumer Price Index (CPI): CPI-linked debt is 52% of total debt. This means the majority of the debt portfolio's sensitivity is affected by CPI. A 1% rise in the CPI leads to an increase of approximately NIS 4.3 billion in debt.

■ Exchange Rate Changes - The external debt is about 13% of the total debt, and therefore changes in the exchange rates against foreign currencies can have a significant impact on government debt.

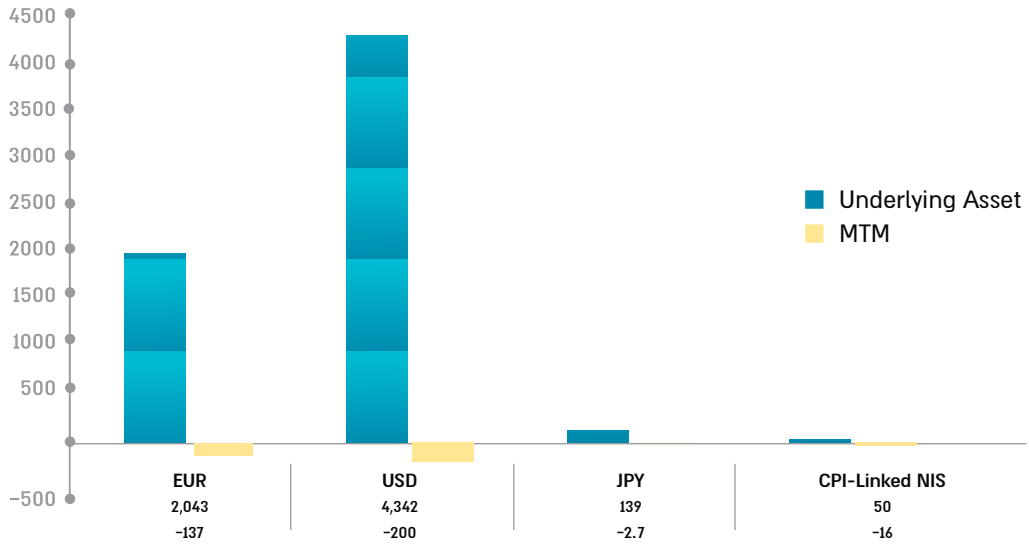


Credit Risks - This is a risk of default. As part of market-risk management, hedging is utilized to reduce the exposure of the government debt to changes in the exchange rate. Hedging transactions are distributed over the long-term through CCS and short-term hedging via forward and FX swaps. In 2019, $6.1 billion of hedging transactions took place for both principal and interest payments.

The State's activities in hedging agreements expose the government to credit risk should the counterparty become insolvent. In order to manage this risk, the State only conducts hedging transactions with primary dealers. Primary dealers have all signed a CSA agreement under an ISDA contract. According to this agreement, collateral equaling the fair value of the transaction is transferred on a weekly basis. Transferring the collateral reduces exposure to the counterparty insolvency risk.

As of December 31, 2019, the government's inventory of hedging transactions totaled $6,574 million. The fair value (mark-to-market) of all positions as of December 31, 2019 was approximately $356 million, to the counterparty's favor.

Underlying Asset (USD, millions)



Additional Risks - The Risk Management Department is always monitoring additional factors or risks that may affect the government's debt portfolio.

Additional models for managing government debt risks

- **Risk cost model** - analysis of the risk cost of the issuance policy for the short, medium, and long term.
- **Structure debt simulations** - building simulations of issuance in the short, medium, and long term utilizing different simulations to view effects of different exposures and issuance strategies.
- **Debt–to-GDP forecasts** - The debt-to-GDP ratio is a key indicator for evaluating the state's financial stability. Projections of the ratio are analyzed under different market and economic scenarios, leading to a better management of the government's debt.
- **Financial pricing** - Use of various analytic models and financial tools to price bonds and hedge foreign currency exposure.
- **Interest payment forecast** - Utilizing a bottom-up method to look at changes in market factors, both in Israel and abroad, and changes in redemption schedules (new issues, switch auctions, buyback auctions) to better forecast distribution of current payments.

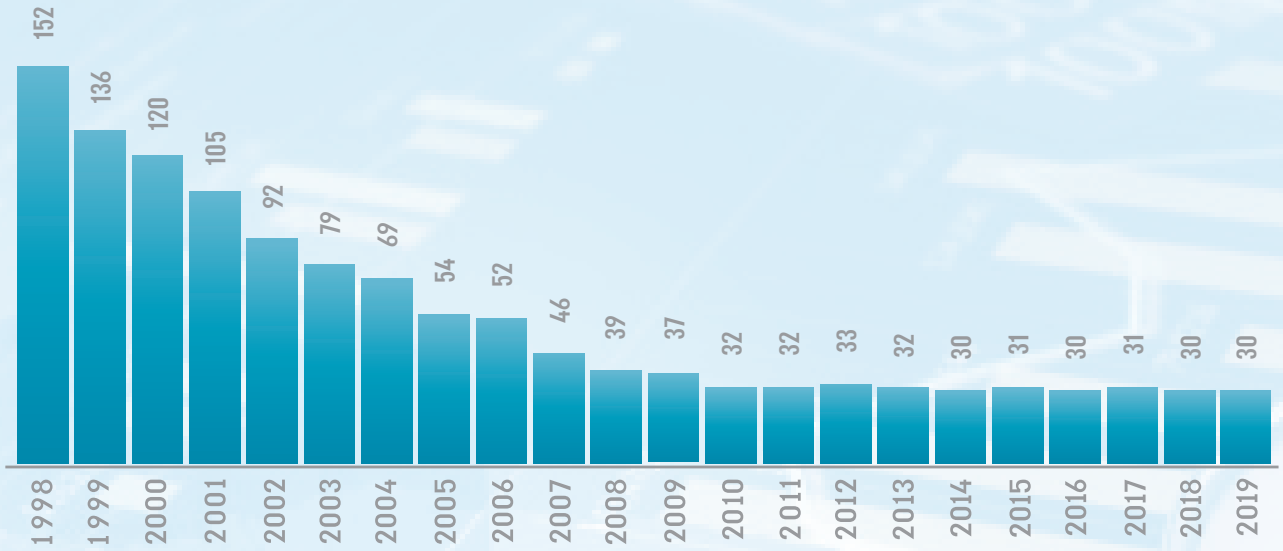
AVERAGE SERIES SIZE AND NUMBER OF SERIES

In 2019, three new shekel-denominated series were issued in the domestic tradable market: ILGOV 0722, maturing in 2022, ILGOV 0330 maturing in 2030 and ILCPI 0529 maturing in 2029.

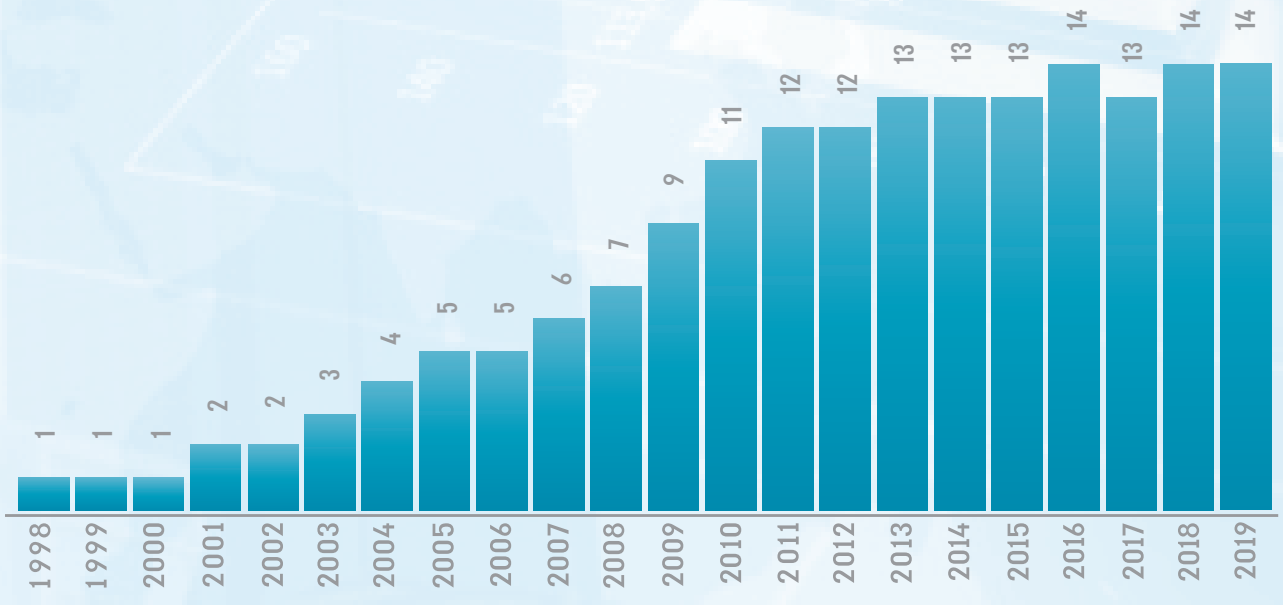
Three series matured in 2019. All other existing series remained the same as 2018 at 30 domestic tradable bonds.

In addition, the GDMU issued and matured T-bills as part of cash management needs.

Number of Tradable Series in 1998-2019



Average Series Size in 1998-2019 (NIS, Bilions)



ORGANIZATIONAL CHART
GOVERNMENT DEBT UNIT

רכזות לשכת חטיבת המימון
Executive Assistants

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