



STATE OF ISRAEL

**CONCLUSIONS OF THE COMMITTEE
FOR THE EXAMINATION OF THE FISCAL POLICY
WITH RESPECT TO OIL AND GAS
RESOURCES IN ISRAEL**

January 2011

Disclaimer: The binding version is the official Hebrew text only. Readers are advised to consult qualified professional council before making any decisions in connection with the documents, which are translated here for general information only.

Executive Summary

On April 12, 2010, the minister of finance appointed the Committee to Examine the Fiscal Policy on Oil and Gas Resources in Israel (hereinafter – the Committee). In accordance with the guidelines of the letter of appointment, the Committee members conducted an in-depth examination of the oil and gas exploration market in Israel and around the world, particularly the natural gas market. The Committee members studied the fiscal system in Israel for this industry, along with corresponding fiscal tools and systems around the world. The Committee members also received and studied the positions of the public as submitted to them in August 2010, including economic and legal opinions provided by the entities that requested to present their positions to the Committee. The Committee members worked on a proposal for an up-to-date fiscal system in accordance with the letter of appointment, and conducted in-depth discussions on the application of the proposed changes to the oil and gas exploration industry in Israel.

On November 15, 2010, the Committee published a draft of its main recommendations for public comment. Beginning on that date, the Committee heard comments on its main recommendations from the public, including gas companies and partnerships, small investors, nonprofit associations and organizations. In that framework, the Committee received written opinions on economic, legal and other aspects, as the submitters saw fit to provide, and it enabled the various entities to appear before it over the course of three days. The Committee also appointed a team that held work meetings to gain a better understanding of the financing needs of the entrepreneurs in the industry. The Committee reviewed the opinions that were submitted and held a series of discussions on the material presented to it. After examining all the information provided to it, and taking into account the need to ensure the continued development of the natural gas industry at the pace required for the economy's needs, the Committee decided to institute changes in the fiscal system as proposed by it in the published draft of its main recommendations.

The main points of the Committee's final conclusions, including the proposed changes in relation to the published draft of its main recommendations, are presented in brief below:

The objective of the fiscal system

Ensuring the continued development of the gas industry, while receiving appropriate remuneration for the public for exploitation of the state's natural resources, at the same time giving suitable incentives to those working in the natural gas exploration industry.

Below are the main conclusions:

A. Leaving the existing rate of royalties

The rate of royalties established in the Petroleum Law, 5712-1952 (hereinafter – the Law), which is 12.5%, is common among other countries around the world. It should be noted that in the decisive majority of countries in which a similar rate of royalties is in effect, the royalties constitute a tool that is complementary to other dedicated fiscal tools through which those countries obtain remuneration for exploitation of their oil and gas deposits, and they ensure the state a minimal consideration for the exploitation of its oil and gas deposits from the start of production. The Committee extensively examined the issue of the royalties rate established in the Law, including the question of raising the rate, and it decided that it would be better to implement alternative fiscal tools for the purpose of increasing the state's share. Therefore, given the use of those tools, the rate of royalties established in the Law should remain as is, due to the negative impact that changes may have on the development of relatively less profitable gas fields, as well as the impact on the profitability of the deposits under variable market conditions, which could also affect the ability to finance the ventures.

B. Canceling the depletion allowance

The depletion allowance is an anomaly in Israeli legislation and lacks any economic justification, including in the context of expensing. This deduction leads to a considerable reduction in the amount of taxable income. This change

is a first and essential component in creating a proper and reasonable fiscal system in the oil and gas exploration industry.

C. Oil and gas profits levy (hereinafter – levy)

Instituting a progressive levy. The rate of the levy will be determined according to the ratio between the cumulative revenues after deduction of the project expenses, royalties and a levy that was paid in previous years, and the overall investment in the exploration and initial development of the deposit. The Committee decided that the levy would not be collected until the stage at which this ratio reaches a rate of 1.5 (repayment of the full investment plus 50%, before tax). The initial rate of the levy will be 20%, and it will rise gradually to 50% according to the amount of the excess profits (a ratio of 2.3).

The proposed formula for the levy is of the R factor type:

$$\mathbf{R\ factor} = \frac{\mathbf{Cumulative\ net\ revenues}}{\mathbf{Exploration\ and\ development\ expenses}}$$

The mechanism will include the following principles:

- **A special incentive for exploration expenses** – by giving greater weight to the exploration expenses in the integration of the investments in the R factor denominator.
- **Normative recognition of the financing costs during setup** – during the development and setup period, until the commercial production of gas/oil, an annual financing cost will be added to the investment expenses in the R factor denominator, which will be set at a normative rate relative to the investment. This mechanism will lead to a significant reduction in the entrepreneurs' risk if an unanticipated delay occurs during the setup period. The normative interest will be set at the average annual LIBOR rate plus a fixed 3% premium.
- **Deduction of super-royalties and other expenses paid by the partnership to third parties or any of the partners** – The partnership agreement and other agreements among the various entities connected with the project

and/or the partnership establish various payments to be made to the partners and/or third parties which, in effect, constitute the participation of those entities in the profits deriving from production of the gas and the oil. Payments as described above will be charged at the rate of the levy as determined in accordance with the R factor formula for the payment recipient. This charge will be implemented by means of a deduction at source by the payor. The amount to be deducted at source, as stated above, will be deducted from the levy liability of the payor.

- The mechanism will apply to each deposit separately, and it will not be possible to redirect revenues or expenses among the various deposits.

D. Accelerated depreciation

Costs that accumulated during the lease stage in the development of the oil and gas assets will be awarded accelerated depreciation at a rate of 10%. The taxpayers will be given the option of choosing one of two alternatives with regard to the amount of the annual deduction:

1. Depreciation in the amount of the taxable income (before deduction of the accelerated depreciation), but no more than 10%.
2. Depreciation in the amount of the sum deriving from the accelerated depreciation rate (10%).

This mechanism will lead to an increase in the cash flow of the entrepreneurs during the first years of production, facilitating repayment of the debt. The flexibility inherent in this mechanism will enable the partnerships working in this field to take full advantage of the tax shield.

E. Application and transition provisions

The proposed changes will apply to all oil and gas deposits as of the publication of these conclusions. However, the Committee established a gradual track for the transition from the existing fiscal system to the proposed fiscal system, by means of the following transition provisions:

- **Higher rate of accelerated depreciation for investments made by the end of 2013** – such investments will be given a maximum accelerated

depreciation rate of 15%, in accordance with the mechanism specified in section (D) above.

- **Gradual application of the levy rates –**
 - **Deposits in which commercial production began before the establishment of the Committee:**
 - These deposits will enter the bottom of the levy track or below that if their level of profitability is lower than the minimum profitability for implementing the levy, so that the rate of the initial levy applying to them will be, at most, the minimum rate in the first year of payment.
 - The rate of the levy imposed on revenues from the deposits will be reduced by 50%, i.e., multiplied by a factor of 0.5, until the end of production of the gas that is currently in the deposit.
 - **Deposits in which production will begin after the establishment of the Committee, but no later than January 14, 2014:**
 - The levy, at its minimum rate, will apply to these deposits only after their revenues reach double the value of the investment (R factor ratio of 2). The maximum rate of the levy on these deposits will apply only after they reach an R factor ratio of 2.8.

Significance

The proposed system has a relatively low impact on the investment decisions of the entrepreneurs, since the levy will be applied after repayment of the cost of the investment plus a suitable return.

In comparison to the current tax system with its various components, no significant change is anticipated in the scope of the payments to the state during the first years of operation of a deposit. The increase in the state's share in the revenues will come mainly in later years in the life of the deposit, and therefore the impact of the proposed system on the debt repayment ability is minor.

The Committee believes that the combination of the above components will lead to the optimal realization of the system's objectives. The share of the state and the public

in the net profit from gas and oil production will increase from one third to 52%-62%. In the proposed model, special attention was given to the high risk entailed in investments in oil and gas exploration. It should be noted that the Committee's conclusions are consistent with the tax systems in practice around the world, also in developed countries, both in terms of the tax mechanisms and in terms of their scope.

The tax rate and the value of the receipts will vary according to the ratio between the level of revenues from the deposit and the scope of the investment that is implemented. The result is the payment of lower receipts to the state by ventures with a low level of profitability, and maximizing governmental remuneration from deposits generating the highest excess profits.

The proposed system is gradual and suitable for a broad spectrum of global situations, and responds dynamically to changes in price, or in the scope of the gas that is marketed, or to changing investment needs.

The outcome of the fiscal changes proposed above in relation to those that were presented in the draft of the Committee's main recommendations is that even under more stringent assumptions regarding the profitability rates of the deposits, and under the existing structure of the partnerships in the industry, the cash flow of the projects during the debt repayment period will not be impaired, thus there will be no actual impairment in the ability to finance the ventures. Reducing the maximum tax rate reduces the rate of the state's share in the profits from the deposits, with the result that the rate of the state's share in highly profitable deposits will not be higher than the accepted rate in most of the countries in which operations are conducted in this industry.

The transition provisions recommended by the Committee allow for a gradual transition from the current fiscal system to the proposed fiscal system. The purpose of this gradual transition is to ensure the ability to rapidly develop deposits that are close to the development stage, in view of the efforts that have already been invested in their development and the financing arrangements that have been planned for them. Given these provisions, there is no impediment, in terms of financing, to developing

the gas deposits that have been discovered to date, within a timetable that is suited to the needs of the economy.

Introduction

- a. On April 12, 2010, the Minister of Finance appointed the Committee for the Examination of the Fiscal Policy with Respect to Oil and Gas Resources in Israel (hereinafter - the Committee).
- b. The appointed members of the Committee are: Chairman of the Committee - Professor Eytan Sheshinski - Public Economics expert; Mr. Yehuda Nassardishi - Director of the Tax Authority; Dr. Udi Nissan - Budget Director in the Ministry of Finance; Professor Eugene Kandel - Head of the National Economic Council; Mr. Shaul Tzemach - Director General of the Ministry of National Infrastructures and Dr. Yaakov Mimran - Petroleum Commissioner, Ministry of National Infrastructures; Mr. Avi Licht - Deputy Attorney General (economic-fiscal) was appointed as an observer to the Committee and Dr. Amit Friedman - Director of Macroeconomics, Macroeconomics and Policy Division of the Bank of Israel Research Department, was appointed as an observer (participating).
- c. Within the framework of the letter of appointment, the Committee members were requested as follows:

“In view of the significant discoveries of gas in Israel and in the maritime zone off its coast, there has been a recent awakening in the oil and gas exploration market in Israel, and there is apparently a possibility for significant discoveries in the future. Hence, this matter is likely to have a considerable impact on the Israeli economy and on the government’s operations in the coming years.

Accordingly, an examination of the fiscal system in practice in Israel (a system that encompasses taxation, royalties and fees) should be conducted in everything pertaining to oil and gas exploration, in order to determine whether this system, which

was formulated in 1952, is also appropriate today. An examination should also be conducted of how it compares with fiscal systems in other countries in the democratic western world. It is also worth examining, in a timely fashion, the way the Israeli economy will contend with the possible ramifications, in the event that significant oil and gas deposits are discovered in the future, with regard to currency rates and the competitiveness of Israeli exports.

In view of the above, you are appointed members of the Committee to examine the fiscal policy on oil and gas resources in Israel.

The Committee's assignments:

1. To examine all components of the fiscal system currently in practice in Israel with regard to oil and gas reserves, and to compare it to countries with similar macroeconomic and democratic characteristics, while taking into account the economic and geopolitical conditions unique to Israel.
2. To propose an up-to-date fiscal policy and address the various licensing and discovery phases of the reserve areas, in progress at the time of establishment of this Committee.
3. To examine the possible ramifications of current and future discoveries for the Israeli economy.

The Committee will summon the relevant entities - including the Ministry of Justice, The Electricity Authority, the Gas Authority, and the leading entities in the industry - to present their position on this issue.”

- d. Accordingly, the members of the Committee conducted an in-depth examination of the oil and gas exploration market in Israel and around the world, particularly the natural gas market. The Committee members studied the fiscal system in Israel and corresponding fiscal tools and systems around the world in this industry. The Committee members worked on a proposal for an up-to-date fiscal system in accordance with the letter of appointment, and conducted in-depth discussions on the application of the proposed changes to the oil and gas exploration industry in Israel.
- e. The Committee also conducted a preliminary examination of the economic ramifications of the significant discoveries of gas and oil on the exchange rates and the competitiveness of the Israeli market. The Committee finds that a further in-depth examination of this issue is of great importance.
- f. As part of their work, the members of the Committee received the positions of the public, in detail and in writing, including economic and legal opinions, as provided by the entities that requested to present their positions to the Committee.
- g. On November 15, 2010, the Committee published a draft of its main recommendations for public comment.
- h. Beginning on that date, the Committee heard comments on its main recommendations from the public, including gas companies and partnerships, small investors, nonprofit associations and organizations.

The Committee received written opinions on economic, legal and other aspects, as the submitters saw fit to provide, and enabled the various entities to appear before it.

The Committee also appointed a secondary team that held work meetings to gain a better understanding of the needs of the entrepreneurs in the industry, particularly with regard to financing. The Committee reviewed the opinions that were submitted and held a series of discussions on the materials presented to it.

- i. After examining all the information provided to it, and taking into account the need to ensure the continued development of the natural gas industry at the pace required for the economy's needs, the Committee decided to institute changes in the fiscal system as proposed by it in the published draft of its main recommendations.
- j. This report presents the conclusions of the Committee, including the changes proposed with respect to the published draft of its main conclusions.
- k. The report presents various data and the significance of the recommended actions. The Committee performed a large number of simulations under a variety of different assumptions and presented a selection of results based on said assumptions; nevertheless, in certain circumstances the results may differ and fall outside the range presented due to the dependence on changes in prices, quantities, costs and the duration of development. The Committee acknowledges this possibility and has taken such changes into consideration in establishing its recommendations, albeit the scenarios are not presented in the report.
- l. The Committee is convinced that, from a purely economic point of view, the appropriate course of action is to continue the development of the existing deposits, including the Tamar deposit, but in terms of political economy, unless the decision makers present a prompt and clear position, the entrepreneurs may utilize the delay in development and the energy security of the State of Israel as leverage and bargaining chip for the amendment of the recommendations for a suitable fiscal system and for profit maximization.
- m. The report comprises six chapters, as follows:

Chapter A - Presents an overview of the gas discoveries and of the natural gas market, as well as details of the activity components of the oil and gas exploration industry in the State of Israel.

Chapter B - Presents an overview of the fiscal systems customarily applied to the oil and natural gas exploration industry around the world, including a global review of the fiscal tools that are used to deliver to the public its share in the economic value deriving from the use of publicly owned natural resources.

Chapter C - Describes the fiscal system that has been applied in the State of Israel since the 1950s, including a review of its overall unique components and their economic significance. This Chapter also discusses the aggregate effect of the fiscal conditions that are unique to the industry on the State's income, as compared against a regular taxation system. Furthermore, the Chapter includes a comparison against the fiscal systems customarily applied globally.

Chapter D - Presents the Committee's recommendations of several changes to the fiscal system that is currently applied in the State of Israel. The Committee specifies the details of and the reasoning for the recommended changes and also provides for the granting of adequate financial incentives to those operating in the industry and for the achievement of the required return on the investment.

Chapter E - Presents the transitional provisions recommended by the Committee.

Chapter F - Discusses the applicability of the Committee's recommendations to existing deposits, examining the existing competition in the industry and taking into consideration the minority opinion of the members of the Committee.

The Committee's report is accompanied by 5 appendices:

Appendix A - Minority opinion of the representatives of the Ministry of National Infrastructure in the Committee.

Appendix B - Legal opinion by Adv. Avi Licht, Deputy Attorney General (economic-fiscal).

Appendix C - Global overview and an opinion by Daniel Johnston, which had been submitted to the Committee during the formulation of the draft of its main recommendations, as published on November 15, 2010, for public comment.

Appendix D - Economic-finance opinion by Professor Robert Pindyck.

Appendix E - Simulations of the effect of the proposed system on various deposits.

- n. **The members of the Committee wish to thank the Secretary of the Committee - Mr. Udi Adiri as well as all the following who had accompanied the Committee along its course and work, night and day, and assisted with intensive and dedicated work in preparing the report, gathering materials and writing: Shaul Meridor, Udi Remer, Alon Padan, Haran Levaot, Adv. Naama Kaufman-Pass, Morris Dorfman, Shimon Cohen, Aharon Eliyahu, Eran Yaakov, Eldad Noach, Zvika Nemet, Liat Shadmi, Rachel Gadasi, Dalit Zamir and Yosef Singer.**

The draft of the main recommendations of the Committee was unanimously approved by all members of the Committee.

This report presents the final conclusions of the Committee, including the minority opinion of the representatives of the Ministry of National Infrastructures.

CHAPTER A

BACKGROUND

This Chapter presents a brief overview of the oil and gas discoveries in Israel, which is followed by an overview of the oil and gas market and an explanation of the existing regulation in the oil and gas market, including the rights granted thereunder. Also presented are the various stages involved in the development of a gas deposit, alongside an analysis of the economic aspects applicable to those stages.

Large-scale natural gas deposits have been recently discovered within the economic waters of the State of Israel. According to estimates, there are many additional gas deposits in the sea. The aggregate value of the deposits amounts to hundreds of billions of New Israeli Shekels (NIS). Additionally, according to estimates, the existence of substantial deposits, with an unknown volume, is probable.

These natural resources are extremely important for the future of Israeli society and its economy. It is the duty of the State to ensure that these limited natural resources are utilized in such a manner that yields optimal benefit to all citizens of the State. The State, as the public's trustee, is required to collect its due share of the profits derived from the sale of gas and oil, while maintaining the effectiveness of the economic activity in the industry and providing incentives for investment in the exploration and development of additional deposits.

A. Oil and Gas Discoveries

Oil and gas exploration in the State of Israel began in the early 20th century, but until the end of the previous century no significant discoveries were made. In 1955, the Helez oil field was discovered in the Southern Plain Region. After the production of approximately 17 million oil barrels, this field holds a limited reserve of extricable oil. Later on, several fields of gas have been discovered on land, which have provided small quantities of gas. Additionally, in the 1990s,

small quantities of oil were discovered in a number of drillings made on the brinks of the Dead Sea and the Mediterranean Sea, about 20 km off shore. The quantities of oil discovered in the Mediterranean Sea were small and did not justify the construction of a production system. The exploration outlook in the State of Israel started changing with the discovery of several marine gas fields off the shores of Ashkelon in late 1999 and at the beginning of the 2000s (Figure 1). The largest of the deposits discovered, “Mari-B”, has been supplying natural gas to the Israel Electric Corp. since 2004 (to date, the Israel Electric Corp. had purchased approximately 17 BCM¹ of said deposit, which is expected to yield an additional 10-13 BCM).

Following these discoveries, a series of seismic surveys was conducted throughout the territorial waters of the State of Israel. These advanced surveys provide a good imaging of the basin to a substantial depth and enable the identification of a variety of potential geological structures and gas and oil traps. The “Tamar” drilling was conducted in 2008 on the basis of said surveys. The drilling, which was conducted 90 km south of Haifa, in an area where the water run approximately 1.5 km deep, exceeded expectations, uncovering a deposit with estimated gas reserves of more than 250 BCM - the largest discovery of natural gas made in the world during the years 2008-2009. Thereafter, another drilling was carried out, closer to the shore, uncovering the “Dalit” deposit, which contains gas reserves of approximately 15 BCM.

These successes have increased the interest in the sea basin south of the shores of Israel. It should be noted that the majority of the aforesaid area was distributed between entrepreneurs who hold various oil rights². The exploration activity that is carried out under said rights includes the performance of additional seismic surveys and geological studies that indicate the existence of further substantial potential in the basin. In this context, the “Leviathan” deposit, in which

¹ Billion Cubic Meters.

² Under the definitions of the Israeli Oil Law, 1952, the term “oil” signifies petroleum, including oil and other fuels as well as natural gas. Accordingly, any appearance of the word oil in this report signifies oil as defined in the law, also including natural gas, unless otherwise construed from the context.

exploratory drillings commenced about three months ago and which, to the date of writing of these lines, according to the reports of the project partners to the Stock Exchange, was found to contain producible gas of approximately 453 BCM, almost double the volume of the “Tamar” field.

The results of several studies, which are revalidated in light of the drillings carried out to date, indicate a high potential for the existence of gas in the Israel sea basin. This basin contains a thick series of relatively young sediments comprising sandy layers of deposits that contain gas, mostly of biogenic origin. The geological situation is similar to that existing north of the Nile delta, in which large quantities of gas have been discovered. The proven (in-place) reserves that have been discovered in the fields off the shores of Israel aggregate approximately 430 BCM³. An analysis by the U.S. Geological Survey (USGS), which was published at the beginning of 2010, estimates that the anticipated gas reserves in the entire eastern basin of the Mediterranean Sea (including its northern part off-shore of Lebanon-Syria aggregate approximately 3,400 BCM. According to the existing geological data, it may be surmised that about two thirds of the aforesaid anticipated quantity is located in the economic territorial waters of the State of Israel.

In 2011, initial drillings are planned to be carried out in the marine licenses of the “Mira” (347) and “Sarah” (348) fields, which are held by the Emanuel-Modiin Partnership, and in the Shimshon license (332), which is held by the Isramco - I.N.O.C Partnership. These licenses, which are located at the central and southern parts of the basin, have a potential for the discovery of gas. In the years 2012-2013, drillings are planned to be carried out in the marine licenses Shemen (387), Gabriela (387) and Hadera Sea (383), which are located in the eastern part of the basin. These drillings are designated to identify oil deposits in areas where small quantities of oil have been detected in the past.

³ This volume includes the overall gas located in the deposits and is higher than the volume of producible gas.

Oil exploration activity has also continued on land over the past decade. In the Meged-5 drilling, which was conducted in 2009 in the area of Rosh Ha'Ayin, quality oil was discovered at significant depth. The Meged discovery is indicative of the likelihood of the existence of significant oil deposits in Israel's land area too.

B. The Natural Gas Market

The State of Israel has interest in continuing the uncovering and development of the gas reservoirs, not only for their high monetary value, which is estimated at billions of shekels, but also as strategic assets, being a growing consumer of natural gas. The conversion of energy activities to natural gas entails many advantages, including lower energy costs, reduction of the air pollution and less emissions of greenhouse gases. Until the introduction of the use of natural gas in the past decade, the energy market in Israel relied mainly on oil and carbon products. Following the uncovering of the gas reservoirs and in view of the predominant advantages of the natural gas, in recent years, major investments have been made in infrastructure measures, such as the adjustment of power stations and the setting up of transmission and distribution networks to facilitate the use of natural gas as the principal source of energy in the State of Israel. Over the past years, natural gas systems have been set up at an aggregate cost of approximately \$ 1.3 billion. Since this process is expected to continue and grow increasingly, the conversion and construction of natural-gas-based power stations - some owned by the Israel Electric Corp. and others privately owned - are planned throughout the country.

Since 2004, the scope of the demand for natural gas has grown and expanded, reaching an annual volume of more than 5 BCM in 2010, with a monetary value of approximately NIS 3 billion, constituting a source for approximately 37% of the electricity production in the State of Israel. Natural gas is not used solely to produce electricity. Heavy and small industry plants as well as other sectors, such as transportation, are potential users of natural gas and are expected to benefit from its predominant advantages already in the coming years, with the development of the required infrastructures. According to projections, the volumes of the use of gas will double in the coming decade, and are expected to reach approximately 10 BCM as early as 2015. Long-term projections suggest that, by the end of the 2020s, the volume of the use of natural gas will reach approximately 17 BCM per year.

Although the volume of the deposits discovered to date is large, the uncovering of additional reservoirs is of great value to the Israeli market as a consumer of natural gas. The uncovering of such reservoirs has importance both in securing the supply of energy that is required to the State of Israel in the coming decades and in diversifying the sources of gas, which would reduce the risk of obstruction of the supply of energy to the market and facilitate the development of competition between different suppliers⁴. The large-scale uncovering of deposits will also allow the export of Israeli gas to other countries, whether by its liquefaction and transport in tankers or through the laying of appropriate pipelines. The export of gas is likely to change the strategic status of the State of Israel.

⁴ In this context, it should be noted that the U.S. company, Noble Energy, and partnerships in the Delek Group (Avner and Delek Drilling hold, together with other companies, leases in all four major deposits uncovered to date (Mari-B, Noa, Dalit and Tamar). Noble Energy, Avner and Delek Drilling hold close to half of the issued marine exploration licenses.

C. Regulation of the Activity in the Industry

The exploration and production of gas deposits in Israel are conducted by private corporations, both Israeli and international. The directives and regulations with respect to said activity are prescribed in the Oil Law, 1952 (hereinafter - **the Oil Law**). Three types of oil rights are issued to entities in the field: preliminary permits, licenses and leases. The Oil Law determines that no person is to explore for natural gas other than under a **preliminary permit**, under a **license** or under a **lease deed**.

The types of rights coincide with various stages of the process of exploration through to discovery, as follows:

1. **Preliminary permit** - is issued for an area for which limited information is available. The holder of the permit is required to process the existing information and to perform additional surveys to complement information gaps, under a work plan prescribed by the Oil Commissioner. The permit is effective for a maximum period of 18 months. A preliminary permit is generally accompanied by a preemptive right which, subject to the approval of the Minister of Infrastructures, grants the holder of the permit a preemptive right to receive an oil right (i.e. a license or a lease) in the area covered by the preliminary permit. As long as a preemptive right exists with respect to an area, no other person will be granted an oil right in the same area.
2. **License** - the license allows the holder thereof to perform examinations, such as seismic surveys, and entitles him to explore for oil in the area covered by the license, an exclusive right to perform test drillings and development drillings in the area covered by the license and to produce oil therefrom and a right to receive a lease after making a discovery in the licensed area. The license requires the performance of drillings, and generally involves the performance of complementary surveys, this as part of the overall actions required under a detailed work plan that

constitutes an integral part of the license. The license is granted by the Oil Commissioner, after consulting with the Oil Council, for an area that does not exceed 400 Sq.m. The license is granted for a period of three years, and may be extended every year up to an overall period of three years. In the event that the results of the drilling prove the existence of a commercial oil discovery, the licensee is entitled to receive a lease on the discovery and may apply for the extension of the license period by no more than two years for the purpose of determining the boundaries of the oil field.

3. **Lease** - the lease confers an exclusive right to explore and produce oil in the area covered by the lease throughout its effective period, subject to the provisions of the Oil Law. The lessee is obligated to develop the oil field in accordance with the provisions of the Oil Law. The holder of a license who has made a discovery, i.e. proved commercial production in the licensed area, and has filed an application in accordance with the Oil Law and the regulations promulgated thereunder, during the license period, is entitled to receive from the Oil Commissioner a lease deed for an area of his choice within the licensed area. The area of the lease will not exceed 250 Sq.m. The lessee is required to commence the performance of development drillings within six months of receiving the lease deed, and within three years he must commence the production of commercial quantities of oil. The lease is for a period of 30 years and may be extended for an additional period of up to 20 years.

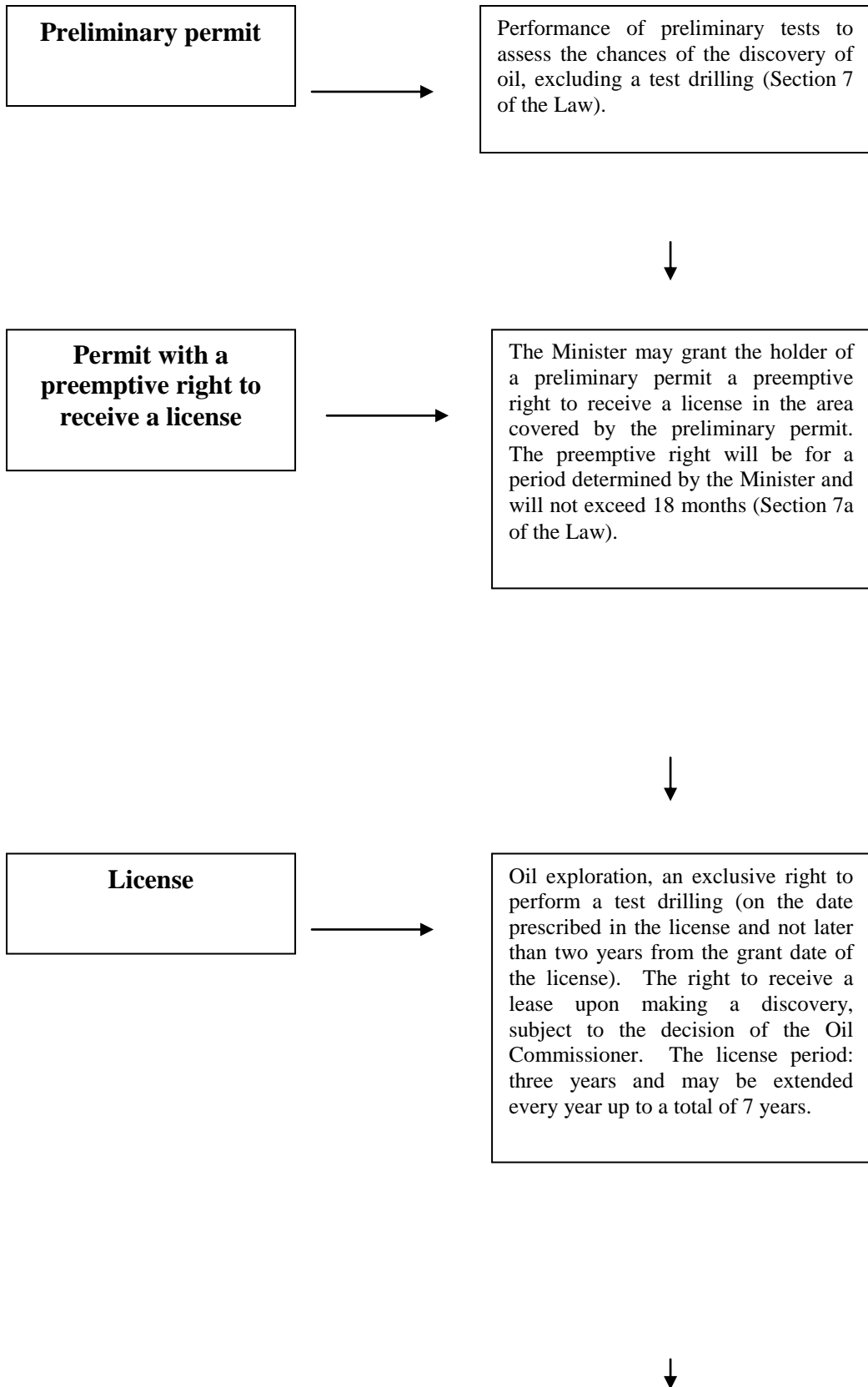
The prerequisites for applying for an oil right include economic requirements (liquid assets that allow the financing of the execution of the work plan and half the cost of a drilling), professional requirements (professional background of the team, engagement with an experienced operator, a detailed work plan and a letter of intent for engagement with a geophysical contractor and for engagement with a drilling contractor).

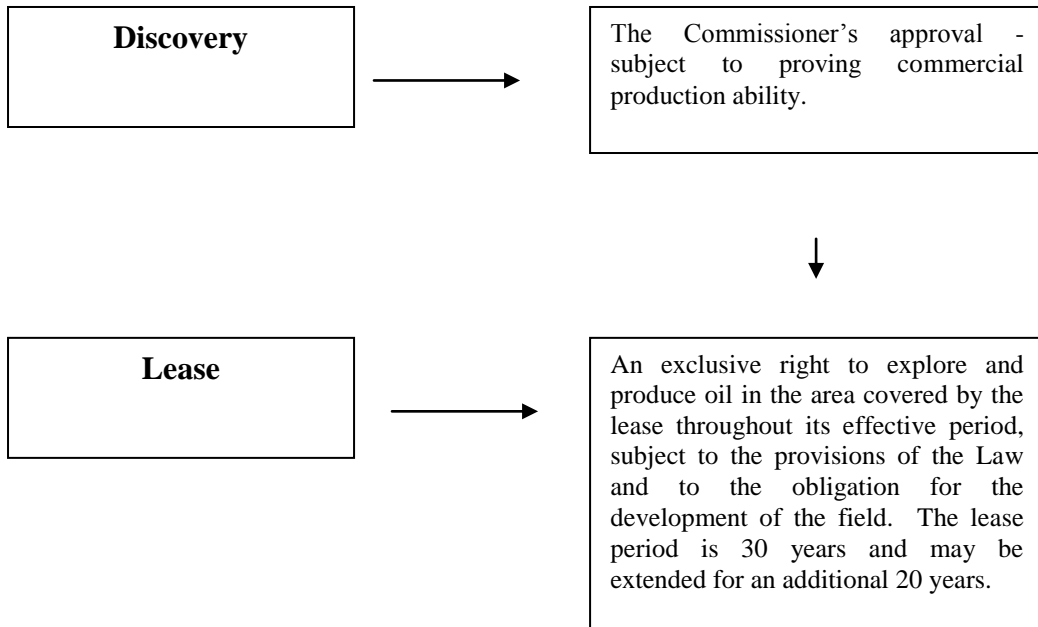
The Oil Commissioner verifies that the application meets the prerequisites that make it eligible for discussion by the Technical Committee and the Oil Council. The applications are sorted by professional criteria and to the extent required - the Minister of Infrastructures may decide on a competition.

The holders of the rights are obligated to execute work plans that are based on detailed and regular milestones. Failure to meet the timetables may result in the oil right being revoked.

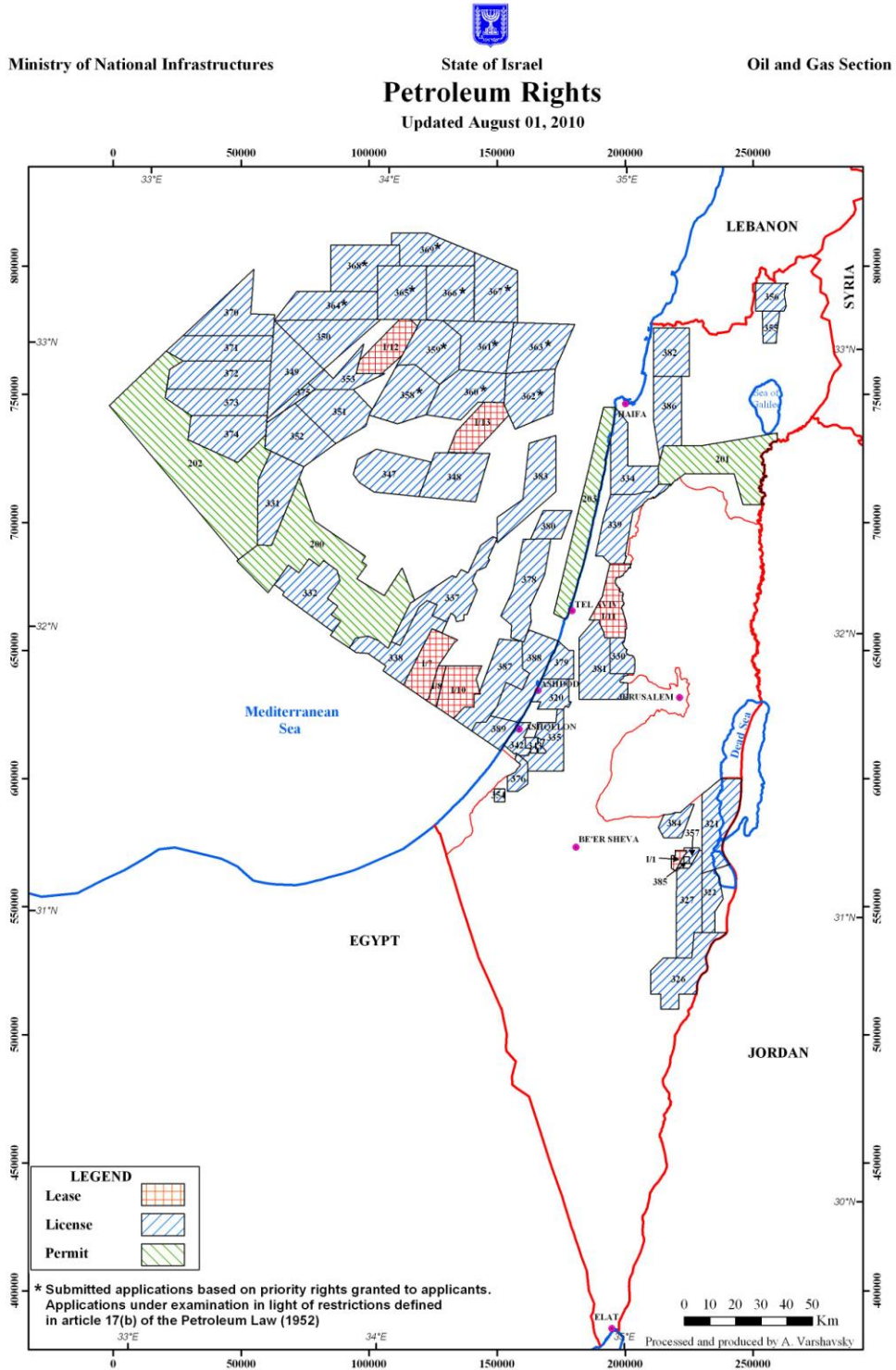
All the material gathered as part of the performance of the various surveys is submitted to the Oil Commissioner, who is obligated to maintain its confidentiality as long as the oil right is in effect.

Diagram of the oil rights:





Presented below is a map of the oil rights in Israel⁵:



⁵ Source: <http://www.mni.gov.il/mni/he-il/NaturalResources/OilSearch/OSMapping/default.htm>.

D. Components of the Industry's Activity

The exploration for oil and gas deposits in the subsoil involves the employment of sophisticated examination methods and the application of advanced technologies that entail substantial financial investment, which are designated to minimize, as much as possible, the risk assumed by the entrepreneurs. The primary tool of modern exploration is seismic surveys, both at sea and on land, which enable the simulation of the subsoil by the reception of sound waves. The deliverables of the simulation allow the identification of structures and traps and, in certain cases, also the assessment of the existence of gases therein. The exploration process also relies on information obtained from previous drillings in the area, various geological studies and models that are constructed for the purpose of improving the projections. The high point of the exploration process is the drilling into the layers of the deposit that had been identified within a specific trap. During the drilling, the characteristics of the penetrated rock are measured, providing initial indications as to its content. If the analysis of the results suggests the existence of oil or gas, production tests are performed for the purpose of determining the commercial production potential of the deposit.

As a rule, the exploration process is hierarchical: first, the basin in which deposits may be found is identified. Then, an assessment is performed as to the existence of an “oil system”, i.e. source rocks, reservoir rocks, cap rocks and conditions for the creation and trapping of oil and gas. Thereafter, detailed seismic surveys are performed, which are designated to identify structures and traps, and finally a drilling point is determined, which has been found to have the highest chances of a discovery. The basin existing off the shores of Israel is a typical basin. It holds several “oil systems” as well as a variety of reservoir rocks and traps with varying geological ages, depths, shapes and locations.

1. The Activity Stages from the Entrepreneurs' Point of View

The objective of the activity of a business company is to generate profits. In order to achieve profits, companies are required to invest in assets, which are

required to generate a cash inflow that covers the investments and delivers return on the investment. Prior to entering a business activity, the company examines the economic feasibility of the planned activity. The primary examination component is the volume of the investment in relation to the anticipated return thereon, this in light of the risks inherent in the investment. The objective of a company is to achieve the highest possible return on its investment, but usually a required level of return may be determined for a company to enter into a certain business activity. Such required level of return embodies the cost of the capital raising required for the company to finance its planned activity and the customary return on equity in the industry in which the company operates, all this based on the characteristics of the applicable industry, particularly as regarding the risk inherent in the industry's activities.

For the purpose of analyzing the profit required for a company operating in the oil industry to recover its investment and generate sufficient return to justify its operation in the field, distinction should be made between the various stages of the project, particularly between the stage of investments in exploration and the stage of investments in the development of the deposits and the setting up of the production facilities, if and when a discovery is made.

1.1. Stage of Exploration

The exploration stage is characterized by a high level of risk. The investment in this stage, at which seismic surveys and test drillings are performed, is relatively low. The volume of the investment in the performance and analysis of seismic surveys is estimated at approximately \$10-20 million per licensed area. The cost of the performance of a drilling is higher, although relatively low, too, in relation to the investment required for the development of a commercial gas discovery. This cost is estimated at approximately \$10-15 million on land and approximately \$ 100 million at sea on average.

In the trail of significant technological improvements over the recent years, the information that is available prior to the drilling provides a significantly higher certainty as to the chances of success of the drilling. A comprehensive study of the probability of success in deep water exploration drillings shows that between the years 1993 to 2002 the rate of success of such drillings was **31%**⁶.

In order to achieve a positive expected profit, the required compensation for the success of such drilling should be at minimum equal to the amount of the investment divided by the drilling's chances of success. Moreover, as explained in greater detail in the financing appendix that is attached to the report⁷, the risk inherent in the exploration may be spread. A company may spread its risks by performing a large number of drillings in different sites, and the investors of the company, on behalf of which it operates, can disperse their investments by holding a diversified portfolio of securities. Hence, other than the adjustment for the probability of the discovery,

⁶ Source: <http://www.ogel.org/article.asp?key=1270> Global Deepwater Terms – The state of Play. Graham Kellas.

⁷ See Appendix D to the report - economic-finance opinion submitted to the Committee by Professor Robert S. Pindyck, international financing expert of MIT.

there is no need for adjustments to the required return, as explained in the financing appendix.

It should be noted that there is a common misconception, in this industry and in general, that the return on the project and the return on the exploration stage are one and the same. The return on the project is an average return, which represents a weighting of a higher return on the exploration stage and a lower return on the development stage. The return on the exploration stage can be extracted by calculation of the NPV (net present value) of the project at the time of discovery, prior to commencement of development. In the sample natural gas project (attached as Appendix E), the NPV of a project, discounted to the date of the discovery, under the existing system is \$ 8.5 billion. The NPV of the same project as of the date of discovery is \$ 2.1 billion and it is presumable that the project could have been sold for such price. Consequently, a day after the discovery, the return on the investment in the exploration at a cost of approximately \$ 150 million is derived from the possibility to sell the venture in consideration of \$ 2.1 billion, and therefore embodies a return of 1,400%, as compared to a return of approximately 16% on the project as a whole.

1.2 Stage of Development and Setting-Up of Facilities

Following a discovery, significant investment is required in a number of components: the performance of additional production drillings, the setting up of facilities, the construction of a rig, as necessary, and the construction of a gas transmission system for purposes of the production and sale of the resource (solely with respect to gas deposits). The risk inherent in these investments is of a different nature. At this stage, the principal risks are demand and price risks, as well as technological risks involved in the setting up of the system. It should be noted that, due to the variation and fluctuation in gas prices, as a rule, the prerequisite for obtaining bank financing for such project is the presentation of long-term gas selling agreements with a guaranteed range of prices. Such agreements reduce, in practice, the level of the risks existing at the time of investment.

Appendix D to the report presents an analysis that is designated to assess the minimum return required to compensate for the risk in this industry. This return was calculated by Professor R. Pindyck, who wrote the appendix, based on theories and the customary practice in the financing sector. This return, which is higher than a risk-free interest rate, is the weighted return between the capital raising cost and the return on the company's equity, which is usually higher. It should be noted that the analysis relates to the average return that is received by international companies operating in a wide range of countries, some of which are characterized by higher or lower risks than those prevailing in the Israeli market.

It is common that activity in the oil industry generates a profit that significantly exceeds that required to justify the investment in the venture. The profit that is in excess of that required for the economic feasibility of an economic activity is referred to as "economic rent". The rent is calculated as the balance of the income from the activity

less all expenses, including the cost of capital. The economic rent in the oil and gas industry mostly reflects the value of the natural resources or, in other words - the value of the resources had the entrepreneurs been required to purchase them. Theoretically, the economic rent may be taxed without having a negative impact on the output or the price, since the rent is a residual value that in theory does not play a role in the firm's decisions with respect to its operating activities. In a licensing system, such as that practiced in Israel, which does not involve significant payment for the license or the lease, the function of the royalties and the taxes is to ensure that the public can benefit from a reasonable proportion of the rent resulting from the use of its proprietary natural resources.

E. Structure of Incorporation in the Oil Exploration Industry

The structure of incorporation in the oil and gas exploration industry is unique. Most of the oil and gas corporations that are currently traded on the Tel Aviv Stock Exchange have been incorporated as limited partnerships. The first limited partnership was listed for trade on the stock Exchange at the end of the 1980s. To date, 12 limited partnerships in the oil and gas industry are listed for trade on the Stock Exchange (in alphabetical order - Avner Oil Exploration, Delek Drilling, Givot Olam Oil Exploration, Glob Exploration, I.N.O.C - Dead Sea, Israel Opportunity - Energy Resources, Isramco Negev 2, Modiin - Energy, Naphtha, Ratio Oil Exploration and Zerah Oil and Gas Explorations). Also traded on the Tel Aviv Stock Exchange alongside the aforesaid partnerships are companies that operate in the oil and gas industry, whether directly or through holdings in said partnerships, such as Alon Natural Gas Exploration Ltd., Delek Energy Systems, Naphtha Israel Petroleum Corporation Ltd. and Cohen Development and Industrial Buildings Ltd.

1. Legal Structure

Detailed below is the legal structure that underlies the partnerships:

1.1 Limited Partnership Traded on the Stock Exchange -

The limited partnerships whose securities are listed for trade on the Stock Exchange have a unique legal structure, resulting from the customary practice and the applicable provisions of the law. The partnership is established and operates under several agreements. The establishment of the partnership is effected pursuant to the limited partnership agreement (hereinafter - the partnership agreement) between two partners - the general partner and the limited partner:

The general partner (usually a private corporation held by entrepreneurs), which is liable for all of the partnership's obligations, is

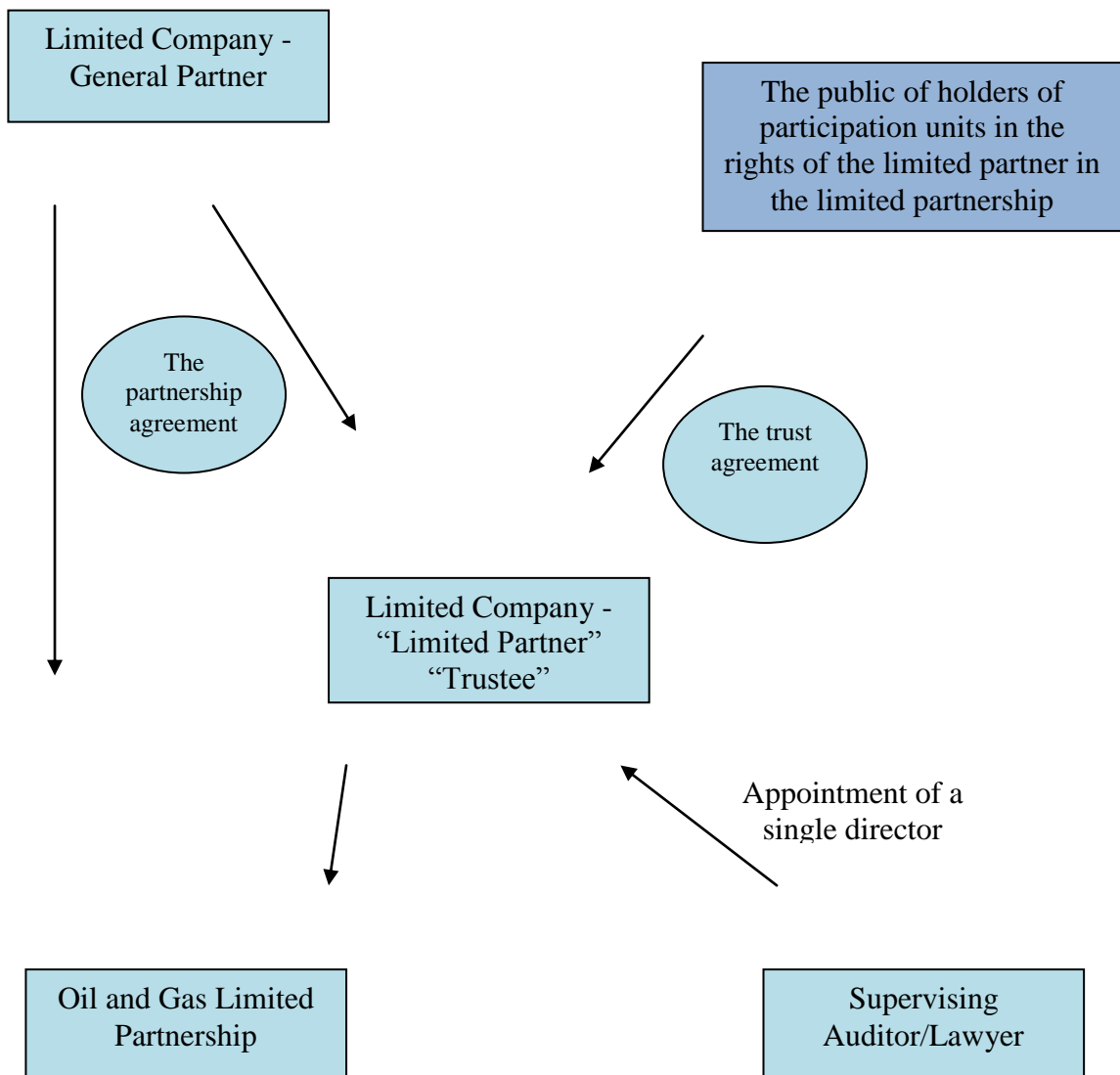
engaged in the management of the partnership, and is also the offeror of the securities in the prospectuses of the partnership.

The limited partner is not liable for the obligations of the partnership, but generally provides most of the capital of the partnership. The limited partner holds most of the interest in the partnership's equity. The share of each of the partners in the entitlement to the partnership's profits (if any) is determined in proportion to their percentage holding in the partnership's equity. The limited partner is also referred to as "trustee", since it holds the participation units in trust on behalf of the public.

1.2 The Securities of the Partnership

The partnership issues participation units, which confer entitlement to participate in the rights of the general partner therein. The limited partner is the "issuer" of the partnership's securities.

Typical Structure of a Partnership Issued to the Public



F. Overriding royalties

In the majority of oil and gas partnerships, the partnership agreement includes a clause that requires the partnership to transfer overriding royalties to the general

partner or to third parties. The rate of the overriding royalties varies between different partnerships. In most oil and gas partnerships, the rate of the super royalty that is transferred to the general partner ranges between 6% to 10% of the partnership's gross income, i.e. before the payment of royalties to the State, expenses, and taxes; nevertheless, in some partnerships the rate of the super royalty exceeds 20% of the partnership's share in the lease. Additionally, in certain cases the partnership is obligated to transfer a super royalty to other parties that are not directly related to the partnership.

CHAPTER B

Overview of Fiscal Tools

This chapter presents an overview of the fiscal systems customarily applied to the oil exploration industry around the world and of the various fiscal tools that are used to deliver to the public its share in the profits deriving from the use of publicly owned natural resources, taking into consideration the different characteristics of the existing tools. For the purpose of studying the topic, the Committee has examined the fiscal systems existing around the world, including through the perusal of various reports, studies published on this topic and an extensive gathering of information. Additionally, the members of the Committee consulted with a world-renowned expert in this field, Mr. Daniel Johnston, who is responsible for the prolific writing of literature on this topic, as well as the issue of reports, among others, under the wing of the World Bank and others. Mr. Johnston appeared before the Committee and his opinion is attached to this report as Appendix C.

A. Classification of Fiscal Systems

The overall fiscal systems customarily applied to the oil and gas exploration industry in the various countries may be classified into two principal systems that differ in their definition of the relationship between the entrepreneurs and the state:

1. Concessionary System

The state issues exploration and production permits to oil companies, whether these are private companies or government companies. Once production commences, the oil companies themselves sell the oil produced and transfer to the state payments for the exploitation of its resources, in accordance with local law and by way of royalties and designated taxes on the income and profits of said companies. This method, which is also referred to as the Royalty/Tax (R/T)

Method, is generally applied in western countries, such as European countries, the United States, Australia, Canada and Israel.

2. Contractual System

This system is customarily applied in regimes that are characterized by a low stability of the legal system. Pursuant to this method, a contract is signed between the oil companies and the “host” state. These contracts are referred to as PSC (Production Sharing Contracts). Within the framework of these contracts, the entrepreneurs bear all the exploration, development and production expenses, in anticipation that these will be covered in the future by the sale of their share in the production that would be achieved. The distribution of production between the entrepreneurs and the State is often effected as follows: a certain portion of the output is allocated to cover the expenses that had been incurred by the oil companies (this portion is referred to as “Cost Oil”), thereby serving to recover the investment of the companies up to its full return. The remaining balance is divided between the state and the oil companies pursuant to the arrangement that had been prescribed. This guarantees the delivery of a significant portion of the profits to the public already in the first year of production. Generally, the state’s share in the output (which is referred to as “Profit Oil”) is significantly larger than that of the oil company. In many cases, the distribution of output is determined on the basis of a formula that relates to the volume of the output, the daily rate of production, the profitability of the company or other parameters⁸.

Despite the different forms of engagement, similar mechanisms of income distribution may be found in both systems.

B. Fiscal Tools

One of the metrics that are customarily used in comparing and evaluating fiscal systems employed in different countries is the “Government Take” index

⁸ The legal characteristics and the difference between a contractual system and a concessionary system are elaborately discussed in Appendix B to this report.

(**hereinafter - GT**), which is indicative of the overall share of the public in the profits deriving from projects in the territory of the state. It should be noted that the nature of a fiscal system is not measured solely on the basis of the value of this index, since said index weighs various fiscal tools, without providing sufficient details of the unique characteristics of each of the tools, both in terms of the incentives to the entrepreneurs and in terms of their impact on the state's income.

Presented below is an overview of the various fiscal tools and their characteristics.

1. Fees and Concession/Licensing Fees

Fees and concession/licensing fees are paid in respect of oil rights: exploration permits and licenses as well as production concessions and leases, the amount of which is independent of the volume of production. A primary advantage of these tools lies in the immediate payment made by the holder of the right simply for the use of the public's oil resources.

Fees and licensing fees have various objectives and characteristics, as specified below:

1.1 Fees (Surface Fees)

Various fees are paid for exploration rights and for production rights. These are generally paid annually based on the size of the area covered by the right. The fee is paid regardless of the execution of the development or production activity. Accordingly, the liability to pay the fee may serve as incentive to return an unutilized oil right. Since the rates of the fees are generally very low, they are not usually regarded as a material fiscal tool.

1.2 Concession/Licensing Fees (Bonus Payment)

Licensing fees are paid as a one-time payment and are usually determined in advance, upon receipt of the exploration right, regardless of the discovery of deposits in the licensed area. The amount of the licensing fees may be determined through negotiations, unilaterally by the state or by way of tenders. The tender method is deemed as preferable in view of its transparency and competitive nature (provided that there are sufficient competitors). The tender shifts the burden of determining the optimal payment from the state to the market. Theoretically, companies would be willing to offer in a tender a price that equals the anticipated discounted value of their profits, taking into account the overall risks. In other words, in an effective, fully competitive market, the price of the bonus determined will reflect the economic rent on the asset, thereby leaving only normal profits in the hands of the bidders. In practice, due to the asymmetry of the information available to different bidders in the same tender (which may result from the activity of one or more of the bidders in adjacent licenses), or due to the small number of bidders, on many occasions a competitive tender is impracticable. If such tender is held, its results will usually vary significantly from those achieved under a high level of competitiveness and without market failures.

In the United States, the number of drillings per area unit is the highest in the world and the players are numerous. Licensing fees, which are determined by way of tenders, are used in the United States as a central tool of the fiscal system. Despite the substantial success of this fiscal tool in the United States, it is not necessarily applicable in all cases. In other countries, as a rule, licensing fees are not used as the primary or most significant tool of collection.

Licensing fees are a convenient tool for collection and management and guarantee immediate income to the state. Nevertheless, since they are charged in advance, regardless of the success of the exploration, the oil companies are exposed to a greater risk, resulting in a higher cost of capital for such companies.

It should be noted that the tender, as a tool, may be utilized in additional ways, which could significantly reduce the economic distortions presented above. Among others, there are tenders in which bids are made not for the prepaid price, but for the public's rate of participation in the profits, tenders that prescribe a progressive mechanism in which the bid is for the maximum rate of distribution to which the state shall be entitled, and more. Nevertheless, an imperative condition for the holding of such tenders is the existence of a sufficiently competitive market.

2. Royalties

The payment of royalties to the state serves as a principal and highly common fiscal tool, and in the past was also used by states as a principal tool for obtaining the public's share of the exploitation of its natural resources. Today, this tool usually serves as a supplementary component in more complex fiscal systems. The oldest form of royalties is the charging of a fixed amount per output unit, which is measured in terms of volume or weight. In the more common form of royalties, the payment is calculated as the multiple of the rate of royalties by the value of the resource ("Ad Valorem" Royalties).

In many fiscal systems, royalties are not necessarily charged on the value of the oil or gas at the selling point. It is quite common for royalties to be charged on the value of the resource at the wellhead. Under this method, for the purpose of calculating the royalties, various expenses are deducted from the selling price, such as costs of transport from the production site to the selling point or costs of various processing processes applied to the resource. These methods make it difficult to define and assess such costs. Additionally, the royalties may be subject to transfer pricing manipulation, i.e. the sale of an asset between related parties at a price that does not reflect its full value.

2.1 Main Characteristics

Stability of the state's income - The royalties generate income for the state already at the commencement of production, and guarantee that the public will receive a minimum level of income from every project that exploits the state's resources. Additionally, the use of royalties facilitates the projection of the state's anticipated income from the deposits (among the available fiscal tools, royalties are considered to be relatively protected against accounting manipulations, since the entrepreneurs' expenses, except as specified above⁹, are not taken into account in calculating the royalties).

Lack of neutrality in investment decisions and in determining the equilibrium price - Unlike taxes that are imposed on profits and hence do not affect the entrepreneurs' considerations in a competitive environment, royalties are charged as a percentage of income. Due to the insensitivity of the royalty tool to the volume of expenses and to the level of profitability, in deposits with a low profitability margin, the charging of a significant amount of royalties may materially affect the entrepreneurs' decision of whether or not to invest in the exploration and development of the deposit. The royalties affect not only the decision of whether or not to invest in the exploration and development of the deposit, but also the effective level of production from the investors' point of view. If the economic feasibility of the continued production of gas from the deposit is borderline due to an additional capital expenditure requirement, a high level of royalties may tip the scale in favor of the discontinuance of the deposit's development. Furthermore, in accordance with the economic theory, the royalties, under reasonable market assumptions, are a component of the function that is optimized by the entrepreneur to maximize its profits and may therefore affect the market price of gas in equilibrium.

Regressiveness - The royalties, due to their collection out of income, are a non-progressive fiscal tool, i.e. their proportion of the profit decreases as

⁹ Regarding the calculation of royalties according to the value at the wellhead.

the profit increases. Consequently, the extent of the burden of royalties is greater for smaller and less profitable deposits. Relying on royalties as a primary source of the receipt of payment for the exploitation of natural resources would result in under-collection from profitable projects and excess-collection from non-profitable projects. Additionally, when the overall profitability of the deposits increases as a result of a rise in energy prices, which are characterized by strong fluctuations, the ratio of royalties to profit decreases. This lack of flexibility, unless balanced through the use of additional fiscal tools that comprise progressive elements, will undermine the stability of the fiscal system and its resistance to pressures to increase their rate when profitability increases and to reduce their rate when profitability drops.

2.2 Progressive Royalties

A number of countries use royalties at a sliding scale that depends on different parameters that affect the level of profitability, this in order to compensate against the limitations of regressiveness. The sliding scale of the royalties may be determined based on one or more of the following: the aggregate volume of production; the rate of production; the selling price; the amount of costs and even the time that had elapsed since the commencement of production.

In Canada, for instance, a progressive method of royalties is applied: the royalties begin at a low rate and increase at the rate of 1% per year. The royalties reach significant rates of 25%-40% only after all the costs have been covered and the original investment in the project has been recovered. Despite the consideration of expenses in determining the rate of collection, this method is defined as a royalty method since the collection is determined not as a percentage of profit, but rather as a percentage of turnover.

2.3 Royalty Rates around the World

According to the overviews presented to the Committee, in approximately 70% of the countries in the world and approximately 75% of the countries in which a concessionary fiscal system is applied, royalties constitute an integral part of the fiscal system. Excluding a small number of exceptions, the rate of royalties in the world ranges between 0% and 20% and the average rate of royalties in the world in systems that are based on the concessionary method is 10%¹⁰.

3. Designated Taxes on Profits

Evidently, royalties play a significant role in fiscal systems for the production of natural resources, but they are not the sole component and, in many cases, not even a main component. A significant increase in royalties for the purpose of increasing the public's share is likely to detract from the economic feasibility of the investment and to have an adverse effect on the incentives and the volume of activity in the industry. In order to increase the public's share, while maintaining economic efficiency, many countries have chosen to use fiscal tools that are based on profit, thereby securing their ability to collect more from the deposits that generate higher profits without imposing an additional burden on deposits that have a borderline or negative profitability. A number of countries have used the fiscal tools existing in the market, applying a higher rate of corporate tax to the oil exploration and production industry in order to receive appropriate consideration for the depletion of the public's natural resources. In the UK, for instance, the corporate tax rate applicable to the industry is 20 points higher than the general corporate tax rate. Increasing the corporate tax rate in the oil and gas exploration industry is not exceptional in the world and stems from the conception according to which the industry-based taxation is, in fact, a means employed by the state to collect the public's share in income deriving from natural resources. The use of the taxation tool is designated to create an industry-

¹⁰ See Appendix B.

based fiscal system that does not consider income alone, but also takes into account the profitability of the companies.

Tax on the Economic Rent (Resource Rent Tax)

The unique characteristics of the gas and oil industry have led to the development of various tools over the past decades for the taxation of the economic rent resulting from the exploitation of the public's natural resources, i.e. the profit in excess of the competitive payment to other manufacturing functions that are used in the production of gas (hereinafter - normal profit). The economic rent in the oil industry mostly reflects the value of the natural resources or, in other words - the value of the resources had the entrepreneurs been required to purchase them. Since the rent constitutes a profit in excess of the normal profit, the taxation of this profit does not reduce the investment below the threshold of the economic feasibility of its execution, since the entrepreneurs receive the competitive consideration before the imposition of the tax. As a rule, these taxation methods have little, if any, effect on determining the equilibrium price of the oil, since tax on profits, and even more so tax on economic rent, should not serve as a parameter in the firms' profit maximization function.

3.1 Measurement of the Cost of Capital

The fundamental objective of the taxation of economic rent is the imposition of a levy only after the normal profit, adjusted for the risk in the industry, has been achieved. The assessment of the normal profit requires a definition of the appropriate cost of capital. This assessment may be conducted in various ways:

- Using the CAPM (Capital Asset Pricing Model) method, which is based on the measurement of the non-spreadable risk component.
- Qualitative comparison against other industries based on an examination of the risk components.
- Review of the interest rates determined for loans used to finance projects in the industry.

- Examination of the return on equity achieved by companies operating in the field.
- Consulting persons that are well-acquainted with the industry.

In this context, it should be noted that the examination of the return on projects in retrospect (ex-post) does not provide good indication of the normal profit. This return is not representative of the return that had served as a deciding factor for the companies in the initial decision (ex-ante) of whether or not to enter into the project, i.e. the return required for operating in the industry, but rather represents the actual return on projects that were successful.

3.2 Progressive Model

Notwithstanding the above said, we must keep in mind that the required interest changes from time to time (mainly in the short-term), this in accordance with macro-economic changes and changes in the characteristics of the industry. In view of the inability to set significant and uniform economic parameters, the use of a progressive model is widespread, which alongside its additional advantages, as specified hereinafter, may also address the possible variations in determining a normative return. When the rate of the levy increases in line with the increase in the level of profitability, the higher rates of the levy are only imposed on projects of which the profitability clearly exceeds that required in order to justify the investment made. A progressive model allows the imposition of the levy at a relatively low rate at the stage in which the project is expected to achieve the profit required to justify the investment and from that point on the rate of the levy gradually increases, reaching the maximum levy rate only at the point where a high level of certainty exists that the return on the project exceeds the required return. It should be noted that, even when the rate of the levy reaches its maximum level, the entrepreneurs continue to receive a significant portion of the economic rent, i.e. from their point of view the return on the project continues to rise. As aforesaid, the progressive model has additional significant advantages from the point of view of the investors and the market, as specified in the paragraphs below:

3.2.1 Distinguishing between Deposits with Different Profit Margins

The taxation of rent generally has a minimum adverse effect on efficiency. The great advantage of tax on profits is that it inherently distinguishes between deposits with different profit margins.

3.2.2 Unforeseen Changes in Economic Conditions

The energy industry is characterized by strong fluctuations in global prices. Strong price hikes, such as those recorded in the oil crisis of the 1970s or in 2008 that had raised the price of oil to more than \$ 130 per barrel, and in contrast the drop in oil prices of the kind experienced in 2009, have a substantial effect on the profitability and economic feasibility of projects for the production of oil and gas. An increase in energy prices could result in profits to the investors from the production of the public's natural resources that are tenfold greater than those anticipated at the time of investment.

Typically, in the event of an unforeseen increase in production costs, states may significantly increase their share in the profits, while ensuring that the entrepreneurs' rates of return are not harmed in relation to the initial situation. Nevertheless, in many fiscal systems, the states' share in the profits actually decreases following an increase in profitability. In view of the aforesaid, and with emphasis on the increase in the companies' profitability as a result of the rise in energy prices, there is a global trend of shifting to progressive taxation.

3.2.3 Fiscal Stability

It should be noted that it is the rigid fiscal systems that are unchanging and unadaptable to the changing economic conditions that increase the level of uncertainty in the industry. In non-progressive fiscal systems, it is probable that, from time to time, changes in macro-economic conditions and in conditions that are unique to the industry - will cause changes to the fiscal system as a result of a

necessity of the public or the entrepreneurs. Over time, a fiscal system can only maintain stability if it is justified, effective and creates reasonable conditions, both for the state and its citizens and for the companies operating in the field.

A progressive system that adapts inherently and in a foreseeable manner to changes in the profitability of the industry reduced the chances that the need may arise to change the fiscal conditions, thereby guaranteeing fiscal stability, which is highly important to entrepreneurs in the industry. Many of the countries that have recently made changes, not only increased the public's share in the profits, but also made sure to shift to a more flexible taxation method that would render any additional upward or downward changes redundant whenever the economic conditions alter once again.

For instance, in Alaska, a system has been recently established, which imposes an additional tax on the profits from the production of oil based on the following mechanism: a minimum rate of 25% shall apply as long as the price of an oil barrel is less than \$ 30. This rate increases by 0.4% for each dollar added to the price of the barrel¹¹. It should be noted that over-progressiveness too has a disadvantage, since in a system that comprises only progressive components, strong price fluctuations create strong fluctuations in the income of the State in those countries where the income from the oil industry is a material component of total income.

3.3 Methods for the Implementation of Tax on Profits

Following the presentation and analysis of the taxation of profits on the level of economic principle, and the presentation of reasoning for the application of a progressive taxation system, we will present two methods that are customarily applied in the world for the implementation of tax on profits and thereafter we will discuss the advantages and limitations of the system for the taxation of economic rent in relation to other taxation systems:

¹¹ Changing Fiscal Landscape, Daniel Johnston, Oxford Journals, Journal of World Energy Law and Business.

3.3.1 Tax on the Economic Rent

The implementation of a tax that is based on economic rent requires an index for measuring the profitability level of each project. An educated use of such index would guarantee, on the one hand, that the tax is collected solely from the economic rent without affecting the normal profits of the oil companies and, on the other hand, that such tax is not tardily collected, thereby detracting from the State's income.

In the past decades, two principal indices had developed in the global oil industry for the implementation of tax on the economic rent: the rate of return (ROR) index and the index of the ratio between the cumulative income inflow to the investment inflow (R-Factor). Each of the two indices is discussed below: **Rate of Return (ROR) Index**- This index examines the rate of return on investment (yield) in each tax period. The tax on the rent applies only when the predetermined threshold rate of return is achieved. If the tax is progressive, for each rate of return a corresponding tax rate is determined, which increases concurrently with the increase in the rate of return. The mechanism may be implemented by carrying forward the investments and losses from one year to the next for the purpose of calculating the tax at the interest rate that was defined as the minimum rate of return to which tax will be applied or by computing the internal rate of return of the cash flow since the commencement of the project until its current year.

Experience around the World - ROR-based systems were introduced into the industry in 1975, in the period that followed the significant rises in the price of oil. In the 1980s, the World Bank started promoting this approach among various countries in Africa. About 10%-15% of the countries in the world currently apply a taxation tool that is implemented using this index. The index is implemented both in countries that operate under a concessionary system and in countries that use a contractual system. The countries that use this index include Australia,

Papua New Guinea, Kazakhstan, Azerbaijan, Ghana, Namibia, Angola, Russia, Venezuela, Canada and more.

In Australia, for instance, since 1984, a uniform tax rate is imposed on excess profits, which is implemented on the basis of the ROR index, so that after a certain return is achieved on the capital invested by the entrepreneur, tax at the rate of 40% is imposed. The interest rate applied in the carrying forward of investments from one year to the next is defined as a long-term interest rate on government bonds in such year (which is derived from the yield to maturity of long-term government bonds) with the addition of a fixed risk premium. Past legislation has determined a risk premium of 15% on all investments, both in exploration and in the development of the deposit discovered. Over the years, the risk premium with respect to development expenses was reduced to 5%, in view of the recognition of the different level of risk involved in the pre-discovery exploration stage and in the stage of development.

In Namibia, on the other hand, a progressive ROR model is implemented. An initial levy of 25% is applied to a rate of return of 15% and increases gradually, reaching its peak at a rate of return of 25%.

Since the 1990s, the industry started to realize that many of the aforesaid fiscal systems do not achieve their objectives and in practice result in a collection that is significantly lower than expected. In Australia, for instance, although the rate of the additional tax is higher than the rate of royalties and the rate of corporate tax, actual collection through this tool accounts for only 8% of the state's income from the industry. Researchers from the International Monetary Fund note that a possible explanation for the low rate of collection is the setting of overly high interest rates¹² in implementing this index.

3.3.2 Index of the Ratio between the Cumulative Income Inflow to the Investment Inflow (R-Factor)

¹² The IMF conference, Emil Sunley, Thomas Baunsgaard & Dominique Simard, *Revenue from the Oil and Gas Sector: Issues and Country Experience*, 2002.

Another approach that enables the achievement of normal return prior to the imposition of tax is based on a simpler principle, pursuant to which the payment of tax will commence only once the entire investment has been recovered with the addition of an amount in proportion to the volume of the investment. When the levy is imposed at a uniform rate, the use of the index may be implemented by multiplying the investments by a certain coefficient for the purpose of determining the tax threshold.

In Norway, for instance, the costs of exploration and development are “enhanced” by multiplying the expenses by a 1.3 factor, thereby guaranteeing that the additional tax at the fixed rate of 50% will come into effect only after the entrepreneurs have recovered all development expenses with the addition of 30%.

Another customary index for progressive excess-profit tax is of the R-factor type. Under this method, which is widely known in the global oil industry, the initial date of payment is determined by the quotient resulting from dividing the project’s cumulative income by the cumulative expenses or the initial investments in the project. The index value is calculated for each tax period, and the higher the value the higher the rate of collection.

In using the R-factor index, the rate of return at which the various tax rates will be applied may only be determined in approximation, since it does not take into account the timing of the income and the time value. Apparently, it is preferable to use the ROR system, under which the rate of return at which tax is applied may be determined directly. However, as explained above, due to the high sensitivity of the ROR model, the ability to implement safety margins to ensure that the high tax rates are only applied to a return in excess of that required for the entrepreneur is limited and may give rise to the risk that highly profitable deposits will not be subject to a significant levy. In fact, the use of the R-factor method, which is less sensitive than the ROR method, allows the determination of wider safety margins and the creation of a tax system that activates the high rates of tax only for high rates of return without giving rise to a significant risk of

under-taxation of highly profitable deposits. The main advantages of the R-factor method over the ROR method are that it is very simple to implement, it is relatively less vulnerable to tax planning and manipulation (gold plating) and it allows the setting of wider safety margins for the required return without giving rise to a significant risk of under-taxation of highly profitable deposits.

3.4 Description of the Difference between Ordinary Profit Tax and the Tax on Rent

Following the presentation of the two methods that are customarily applied in the world for the collection of tax on economic rent in the gas and oil industry, we will examine the difference between corporate tax and the tax on rent. Although corporate tax is also designated as a profit tax, taxes on economic rent, which are common in the oil and gas industry, differ from corporate tax. The material differences are mainly reflected in the manner in which the two types of taxes relate to the initial investment:

3.4.1 Depreciation

Corporate tax depreciates investments over the life of the asset, whereas excess-profit tax, as customarily applied in the industry, recognizes the investment in full and comes into effect only after the entire investment has been recovered with the addition of return. Accordingly, excess-profit tax, as a rule, does not give rise to a risk for the non-recovery of the investment. Since the oil and natural gas production industry is characterized by substantial investments in exploration and the development of facilities, prior to actual commencement of production, this difference is highly significant in terms of the appeal of the investment. The taxation of excess profits does not affect the cash flow of the project in the first years, thereby reducing financing costs and allowing the financing of projects at a relatively high leverage. On the other hand, the disadvantage of the taxation of the economic rent is the deferral of the income to which the State is entitled, while exposing it to risks of the failure of the project. In a reality in which the government considers the promotion of gas and oil explorations a worthy

objective, the assuming of such risk by the government in place of the entrepreneur and the banking system that is required to finance the investment is appropriate.

3.4.2 Recognizing the Alternative Cost of Equity

By deducting financing expenses from the tax base, corporate tax takes into account the cost of the debt. But equity, too, has a price, which is the alternative return that such equity would likely have achieved in projects involving a similar risk. The alternative cost of equity is not reflected in actual expenses, and is therefore not recognized for corporate tax purposes. Corporate tax is applicable to the entire normal profit, without expensing equity and without recognizing a normative return. In opposition, tax on rent does not distinguish between the forms of financing and recognizes the entrepreneurs' need to achieve a required return on the entire investment, i.e. both on equity and debt capital, regardless of the manner of financing of the investment.

3.4.3 Safety Margin - Higher-than-Normal Return

As a rule, taxes on economic rent are not meant to apply at their full rate as soon as the normal profit is achieved. For various reasons, including the need to compensate the companies in the market for exploration expenses that did not yield a discovery, safety margins are applied, which grant the investors further deferral of the initial payment of the full burden of tax. In taxes with a variable rate, which rises in line with the increase in profitability, the high tax rates are only imposed once it is certain that the project's profits exceed the normal profit. This form of taxation guarantees that the full scope of the tax is only imposed on excess profits.

3.4.4 Boundaries of the Tax (Ring-Fencing)

Unlike corporate tax, which generally allows the setting off of losses resulting from the overall business activity of the company against income deriving from a

certain source of income of the company, tax on rent, which has a high rate in relation to the tax rate customarily applied to business activity in the market, only includes the income deriving from the activity of the production of gas and oil. Additionally, in many countries it is customary to “fence-off” projects and calculate for each project separately the payment required, based solely on its individual income and expenses. There are several reasons for this, including the prevention of cross-subsidizing by setting off the exploration or development expenses of one deposit against the income from a productive deposit as well as the creation of unequal terms between players who possess productive deposits and players who do not possess productive deposits.

4. Conclusion

The fiscal systems customarily applied to the oil and gas exploration industry in the various countries operate under two principal regimes that differ in their definition of the relationship between the entrepreneurs and the State - a contractual system is more common in countries where the regime is characterized by low stability and a concessionary system, is typical of developed countries. These two methods are characterized by different and diverse fiscal tools, such as fees, licensing/concession fees, royalties and designated taxation of profits. These fiscal tools possess different characteristics and the use of each tool follows the different objectives that had been defined by the state. Designated taxation of profits as a tool is increasingly taking hold of a central role in fiscal systems around the world, among others, due to its progressive nature and limited impact on the entrepreneurs' considerations.

Two principal models are used to collect designated tax on profits - the ROR model, under which the rate of tax is determined by measuring the project's rates of return, and the R-factor model, under which the rate of tax is determined based on the ratio of income (less royalties and designated tax on profits) to the investments made by the entrepreneurs. Due to the qualities of these tools, particularly their allowing differential collection of receipts based on the economic traits of the various natural resources and the economic conditions prevailing in the energy market, they are becoming increasingly widespread in the gas and oil exploration industry worldwide. The fact that global oil prices are changing frequently, as are the technologies and the complexities involved in the production of the natural resources, many countries have reached the conclusion that tools that are not based on such characteristics hinder both the governments' ability to receive a fair share of the income from the public's natural resources and the ability of the investors to plan ahead.

The fiscal tools described in this chapter are generally not detached, but are implemented within a framework that combines several tools, this both in order to optimize their integration in the existing fiscal framework of each individual country and to make the most of the advantages of each tool. This assembly of fiscal tools comprises the complete fiscal system.

CHAPTER C

Description of the Existing Fiscal System

The fiscal system that has been applied to the oil exploration industry in the State of Israel since the 1950s includes special payments in the form of fees, royalties and special deductions for tax purposes.

In this chapter we will first review the overall components of the fiscal system of the Israeli oil industry, describe the characteristics of each component and its economic significance, present the rates of the overall system and its characteristics, and finally examine the existing system in relation to the tax rates applicable to other industries in the economy and against the fiscal systems customarily applied globally.

A. Review of the Fiscal System

The fiscal components that are unique to the industry are provided for in the following laws and regulations:

- The Oil Law, 1952 (hereinafter - **the Oil Law**)
- The Oil Regulations, 1953 (hereinafter - **the Oil Regulations**)
- The Income Tax Ordinance [New Version], 1961 (hereinafter - **the Income Tax Ordinance**)
- Income Tax (Deductions from the Income of Holders of Oil Rights) Regulations, 1956 (hereinafter - **the Deduction Regulations**)
- Income Tax (Rules for Calculating Tax for the Holding and Sale of Participation Units in an Oil Exploration Partnership) Regulations, 1988 (hereinafter - **the Participation Units Regulations**)

1. Fees

The receipt of an oil right involves the payment of an annual fee. The rate of the fee per area unit is determined according to the type of right. Presented below are the rates of the fees as stipulated in the Oil Regulations:

- **Preemptive right fee (Section 15C of the Oil Regulations)** - The holder of a preliminary permit to whom it was decided to grant a preemptive right will pay a fee at the annual rate of NIS 60 per 1,000 dunams (approximately 247 acres).
- **Licensing fee (Section 11A of the Oil Regulations)** - The licensing fee makes a distinction between licenses at sea and on land:
 - License at sea - the holder of a license at sea will pay NIS 67 per annum for every 1,000 dunams.
 - License on land - the holder of a license on land will pay between NIS 101 and NIS 336 per annum for every 1,000 dunams in the first four years of the license and NIS 1,008 per annum for every 1,000 dunams commencing in the fifth year.
- **Lease fee (Section 37A of the Oil Regulations)** - The holder of a lease will pay an annual fee of NIS 1,010 for every 1,000 dunams.

Economic Significance -

A license is granted for an area of up to 400,000 dunams (approximately 99,000 acres); accordingly, at the current rate of NIS 67 per 1,000 dunams (approximately 247 acres), the annual payment for the license to explore at sea aggregates approximately NIS 27,000 at most. The area of a lease is up to 250,000 dunams (approximately 62,000 acres); accordingly, at the current rate of NIS 1,010 per 1,000 dunams the annual payment for a lease aggregates approximately NIS 252,000 at most.

2. Royalties

The gas and oil reservoirs are a valuable publicly owned asset and therefore the State must demand payment for their exploitation and as compensation for their depletion. This receipt is in addition to the existing systems of taxation with respect to the general activity in the economy. Under the existing fiscal system, the payment of royalties is the only means for such payment.

Section 32 of the Oil Law provides for the liability for the payment of royalties in respect of the production of oil:

32. (a) The holder of a lease is liable for the payment of royalty at the rate of one eighth of the quantity of oil produced from the area of the lease and utilized, excluding the quantity of oil that was used by the holder of the lease in operating the area of the lease, and shall also be liable for a lease fee on the area of the lease at the highest rate of the license fee determined under Section 19.

(b) The holder of a lease will pay to the State Treasury, in the payment periods that shall be prescribed in the Regulations, the market value of the royalty at the wellhead.

The Law stipulates that the rate of royalties that the holder of a lease is required to pay is 12.5% of the market value of the oil at the wellhead. If a market price for the price of oil at the wellhead is not available at the time of calculation of the royalties, costs of the transport of the resource from the wellhead to the selling point should be deducted from the selling price. In projects for the production of gas that are based on deposits at sea, there is uncertainty as to the definition of the wellhead and the volume of the costs that should be attributed to the transport from the wellhead to the selling point, making it difficult to determine the manner of calculation of the royalties that is required under the law. This unclarity has lead to numerous disputes between sovereign states and oil companies with

respect to the definition of the value of gas at the wellhead, which more than once had to be resolved in court.

For the purpose of calculating the value of the gas at the wellhead in the Yam Thetis project, 70% of the expenses incurred in the construction of the rig and its facilities were recognized (60% for seabed facilities); 60% of operating expenses and 100% of the expenses in respect of the transmission pipeline and off-rig production facilities. As a result of said deductions and of the ratio of the expenses for which they had been allowed to the total income of the project, the rate of royalties that had been paid on account of the Mari-B deposit between the years 2004-2010 out of the total turnover for said years amounted to 10.6%. In practice, the rates for the recognition of the expenses that had been determined in the Yam Thetis project result in a royalty system that, in terms of quantity, resembles more the imposition of tax on profits rather than the imposition of royalties on gross income.

3. Tax Benefits

Tax arrangements exist in the oil industry by virtue of the Deduction Regulations promulgated in 1956. In principle, the Deduction Regulations allow for special deductions that reduce the taxable income of those operating in the industry. In 1988, the benefits in the industry were expanded following the issue of the Participation Units Regulations, which allow for the transfer of the benefits enumerated in the Deduction Regulations also to the investing public through the trading of securities (participation units) of partnerships that operate in this field.

The tax benefits are on a number of levels:

- Depletion Allowance - deduction for the holder of a right in an oil asset that produces oil or gas.
- Recognition of exploration and development expenses as an operating expense - current and immediate deduction of exploration and development expenses in an oil asset.

- Deduction due to the abandonment of an oil asset - capital losses on an abandoned oil asset will be allowed as an operating expense.
- Depreciation in respect of the acquisition of land - allowing the deduction of land-acquisition expenses.
- Exemption from the payment of customs duty and other import taxes - the equipment that is imported for purposes of the operations in the industry is exempt from customs duty and other import taxes.
- Note should also be made of Regulation 8 of the Deduction Regulations, which determines that, subject to the approval of the Commissioner of Oil Explorations, these benefits shall also apply to exploration and development activities outside of Israel.
- Tax benefits to the holders of participation units - the possibility of transferring the aforesaid benefits that are provided for in the Deduction Regulations also to the investing public on the Stock Exchange.

Presented below are the benefits specified in the Deduction Regulations:

3.1 Depletion Allowance

Regulation 3 of the Allowance regulations grants the holder of a benefit an imputed deduction with respect to the oil asset. This deduction is granted annually as an operating expense. The regulation determines that, in calculating the taxable income, a deduction will be allowed with respect to “the depletion of the oil inventory” from the same deposit in the same tax year. This deduction reduces the taxable income of the benefit holder in the oil asset.

The depletion allowance will be the greater of:

- a. A deduction at the rate of 27.5% of the gross income¹³ in the tax year, but not more than 50% of the net income¹⁴ deriving from the oil asset in the same tax year (hereinafter shall be referred to as “depletion allowance by the percentage method”).
- b. Depletion allowance at the cost price - the quotient that is derived from the division of the adjusted price of the deposit at the beginning of the tax year, by the estimated number of gas units that existed in the deposit at the beginning of the tax year, and multiplied by the number of gas units that had been produced and utilized out of the deposit during the tax year. The adjusted price of the deposit at the beginning of the tax year is the original cost of the assets less the allowed depletion allowance. This method is only applicable if an acquisition of the oil asset had been effected, since otherwise the adjusted price - the cost price - is null.

The method of calculation is as follows:

$$\text{Depletion allowance at cost price} = \text{cost of the oil asset} * \frac{\text{Units produced during the year}}{\text{Potential production units}}$$

In practice, the depletion allowance constitutes a tax benefit that is granted to those operating in the oil and gas exploration industry. Apparently, the depletion allowance should reflect the depletion of the resource in the deposit and consequently - the impairment in the value of the asset. However, since from the outset no payment has been made for the resource in the deposit, and the depleted

¹³ Gross income is defined in the Deduction Regulations as the amount received from the sale at the wellhead of the crude oil produced and utilized from the benefit, or an amount that would have been received had the oil been sold at the wellhead, less the royalty payable out of the same benefit, i.e. income less royalties.

¹⁴ Net income - gross income less the deductions that may be attributed to the production of oil from the benefit, which are allowed in accordance with Section 17 of the Income Tax Ordinance, and with the exception of the depletion allowance.

asset is owned by the state, there is no economic justification for this excess deduction.

Let us now examine the value of the depletion allowance, which as aforesaid constitutes an excess benefit, since in the absence of a payment for the acquisition of the asset there can be no justification for a deduction due to its depletion.

In examining the value of the tax benefit conferred by the depletion allowance, we will address the depletion allowance by the percentage method. As aforesaid, this tax benefit allows the tax payer to deduct 27.5% of the gross income, less royalties, but not more than 50% of the net income deriving from the oil asset. The value of the depletion allowance therefore depends on the following factors: (1) the amount of the turnover, as it allows the deduction of 27.5% of the turnover less royalties; (2) the amount of the net income from the oil asset, as the depletion allowance is not to exceed 50% of the net income from the oil asset; (3) the amount of taxable income deriving from the overall activity of the tax payer, since if the overall activity of the tax payer does not generate taxable income that at least equals the amount of the deduction, the tax payer is unable to fully benefit from the depletion allowance in the year in which the deduction is allowed; (4) the rate of tax in the years of utilization of the depletion allowance, since the reduction in the tax payment as a result of the deduction is in direct proportion to the rate of tax in the years in which the deduction serves as a tax shield.

Accordingly, the amount of the deduction will be $87.5\% \times 27.5\%$ of the turnover, which is approximately 24% of the turnover, assuming that the rate of royalties is 12.5% of the turnover and assuming that the net income from the oil asset is sufficiently high. In practice, the ratio of the depletion allowance to the turnover is relatively higher, since for the purpose of calculating the royalties, the costs of transport from the wellhead to the selling points are deducted. Therefore, for purposes of the following analysis we will assume that the ratio of the depletion allowance to turnover is 25%.

The table below presents, under certain assumptions, the extent of the tax saving, as a percentage of turnover, that is conferred by the depletion allowance under various tax rates:

Tax rate	Value of the depletion allowance as a percentage of turnover*
45% (high marginal tax rate in 2010)	11.3%
45% (high marginal tax rate in 2016)	9.8%
25% (corporate tax rate in 2010)	6.3%
25% (corporate tax rate in 2016)	4.5%

* Assuming that the amount of net income from the oil asset and the amount of taxable income of the tax payer allow for the full utilization of the deduction.

3.2 Recognition of Capital Expenditure as Revenue Expenditure for Current Deduction Purposes

Regulation 4 of the Deduction Regulations permits the current deduction of exploration and development expenses¹⁵ that in practice constitutes investment in an asset that is an oil asset. The Regulation stipulates that capital expenditure in the field of exploration and development incurred by the holder of an oil right will be deemed, if so elected by the holder of the right, as revenue expenditure that is allowed in deduction on a current basis. The Regulation permits the deduction of investments in the exploration and development of an oil asset against any income, this being executed immediately, in the year in which the expense is incurred. This differs from the ordinary tax rules both in the event of the successful generation of income from the exploration and development

¹⁵ The definition of exploration and development expenses in the oil Regulations: “exploration and development expenses” - all the expenses incurred in the exploration and development of all or part of an oil asset, including geological, geophysical, geochemical and other testing and experimentation expenses and excluding the expenses incurred in the acquisition of an asset for which a depreciation rate has been determined under the Income Tax (Depreciation) Regulations, 1941.

endeavors and more so in the event of the failure to generate such income. Under the ordinary tax rules, if the investments in exploration and development generate income, the deduction with respect to such income will not be currently and immediately recognized, but will be spread over a number of years according to the rate of depreciation that has been determined for the asset. If the investments did not generate income, as in the case of a dry drilling, the expense would be considered as a capital loss that may not be deducted other than against capital gain, whereas with respect to an oil asset, exploration and development expenses may be set off against any income under any circumstances.

The possibility of current deduction actually confers a twofold benefit as regarding exploration and development expenses. First, it reduces the risk that is assumed by the entrepreneurs, since it allows the deduction of the expenses for tax purposes against any source of income. Therefore, if the exploration drilling fails, the tax payer can benefit from the deduction of the expense against other income. Secondly, since the deduction may be effected immediately, the present value of the tax shield is higher than it would have been had the deduction been effected by way of depreciation over several years. In practice, this arrangement transfers to the state part of the risk that is taken in entering the project, as the reduction of the state's receipts through the tax shield is naturally at the expense of the state's income.

3.3 Depreciation of Land and the Deduction of the Balance of Investment in Land

Regulation 5 of the Deduction Regulations stipulates that the holder of a benefit in an oil asset by virtue of Section 40 to the Oil Law, who had acquired land for purposes of the exercise of the oil right, would be allowed to deduct the expense incurred in respect of the acquisition of the land, this similarly to a depreciation expense (according to the number of years during which the holder of the benefit is entitled to hold the acquired land). Additionally, if at the time of expiration of the right of the holder to the land, the amount of investment in the land has not yet been fully deducted; such balance of investment shall be allowed in deduction

in the tax year in which the right expires. It should be noted that in the general tax system no recognition of land acquisition is allowed for purposes of depreciation deductions, this benefit being unique to the oil industry.

3.4 Deduction for the Abandonment of an Oil Asset

Regulation 6 of the Deduction Regulations permits the current deduction of a capital loss originating in the abandonment of an oil asset, i.e. immediate deduction against any source of income, whereas under the provisions of the Income Tax Ordinance, in calculating the taxable income, such capital loss would have been recorded as a capital loss that may only be deducted against capital gains.

3.5 Deductions Carried Forward to Future Years

Regulation 7 of the Deduction Regulations permits the carrying forward of the deductions provided for in said Regulations from one year to the next, against any source of income, if in a certain year there was insufficient or no taxable income against which these could be deducted.

It should be emphasized that pursuant to the provisions of the Income Tax Ordinance, loss originating from operating activities may be off-set against any other taxable source of income, whereas a loss carried forward from a previous year may only be deducted against business income or against capital gains in the business.

3.6 Applicability of the Oil Regulations to Drillings Outside of Israel

Regulation 8 of the Deduction Regulations applies all of the regulations also to a tax payer who is engaged in oil exploration outside of Israel, provided that he had obtained an approval to this effect from the Oil Commissioner.

3.7 Exemption from the Payment of Customs Duty and Other Import Taxes

In addition to the deductions provided for in the Deduction Regulations, Section 46 of the Oil Law determines that the holder of an oil right may import into Israel, on his own or through an agent, without the payment of customs duty or any other import tax, all of the machinery, equipment, facilities, fuel, houses, transmission system, etc., that he requires for oil purposes, with the exception of private motor vehicles, as defined in the Transportation Ordinance [New Version], other than a jeep or a similar terrain vehicle, and with the exception of consumables. The right under the Section is granted under qualification that the aforesaid may not be purchased in Israel at a quality that does not fall below that stipulated by a standard of the American Petroleum Institute. Section 46 of the Oil Law stipulates that the holder of an oil right who has purchased unused cement, fuel or tires will be refunded the excise paid on the manufacturing thereof, if he has proven that he had used them for oil purposes and that the price that he has paid for them included excise.

3.8 Participation Units Regulations

We will once again provide a brief presentation of the structure of incorporation existing in the industry as background to the discussion of the Participation Units Regulations.

For the purpose of carrying out the actions required under the license and later on under the lease, all holders of an exploration license or a lease constitute an operating and financing function of a joint venture the objective of which is the

exploration, development and production of the oil asset. The parties that hold the joint venture establish an agreement for the joint operation of the joint venture. Every year, the joint venture submits financial statements to the holders of interest in the joint venture, and each partner recognizes in its financial statements its share in the profits or losses of the joint venture.

The parties operating the joint venture are Israeli-resident companies, foreign companies and partnerships. In accordance with Section 63 of the Income Tax Ordinance, a partnership is not a tax payer, but the partners themselves are the tax payers, and the profits or losses of the partnership are allocated to each of the partners based on its proportionate share in the partnership.

It should be noted that under the structure of incorporation of a partnership, at the end of each year the operating results of the partnership must be allocated to each of the partners; consequently, in practice, unlike a company, a partnership cannot carry forward losses to future years and does not accumulate losses and is therefore unable to use losses as tax shields in subsequent years.

In 1988, the Participation Units Regulations¹⁶ were published, pursuant to which participation units of partnerships that are engaged in oil explorations may be issued for trade on the Tel Aviv Stock Exchange. The holding of a participation unit reflects a partial holding in such partnership. These Regulations establish a unique arrangement that is only applied in the oil exploration and film industries, thereby distinguishing them from other industries in the economy. The distinction stems from the treatment of partnerships in the Income Tax Ordinance as well as from the benefits that are conferred upon the holder of the participation unit, as described below.

As aforementioned, a partnership is not a tax payer, but rather the partners themselves are the tax payers. This principle is also maintained in partnerships

¹⁶ It should be noted that at the time of approval of the Participation Regulations, it was emphasized before the Finance Committee that the effective period of the Regulations has been limited to one year for the purpose of examining the new tool, and since then their period has been extended each year.

that are traded on the Stock Exchange, so that the profits or losses of the partnership are transferred to the holders of the participation units of the traded partnership, whether these be individuals (self-employed or employees) or companies, based on their proportionate holding of the partnership.

A holder of a participation unit may deduct from its income its share in the losses of the partnership up to the cost of acquisition of the participation unit. The loss may be set off against any other taxable source of income. The deduction is effected through a certificate that is issued to the holders of participation units by the Tax Authority - "Certificate for the Calculation of the Deduction for an Holder Eligible due to the Holding of a Participation Unit". It should be noted that for the purpose of recognizing such expenses the holders of the participation units are required to fill out a simple form that may be downloaded from the website of the Tax Authority, which is titled - "Calculation of the Deduction for Holders of Participation Units in an Oil Exploration Partnership" (Form No. 858).

Any profits derived by the partnership are credited to each of the partners based on their share in the partnership and are deemed as business income.

It should be noted that, since many of the holders of participation units are individuals who are not required to submit an annual report on their income to the Tax Authority, in practice an arrangement has been established between several partnerships and the Tax Authority concerning the withholding of tax at source in the event that the partnership has accumulated profits from its activity. This arrangement is designated for the collection of tax on the profits of the partnership from a project, which are allocated to the partners each year based on their proportionate holding. Unlike incorporation through companies, which are subject to a two-phase taxation of corporate tax and dividend tax, the withholding of tax at source in a partnership under the aforesaid arrangement is performed in a single stage according to the maximum marginal tax rate applicable to individuals, since the majority of the partners are individuals. As a result of the withholding of tax at source and since the losses of a partnership cannot be carried forward to future years, incorporation as a partnership rather than as a

company reduces the amount of the cash flow available for the repayment of debt.

Nevertheless, despite these flow impacts, incorporation as a traded partnership is a benefit that is unique to the oil (and the film) industry, which confers upon the holders of participation units the two following unique benefits: first, the holders of participation units enjoy the general tax benefits provided for in the Deduction Regulations, as detailed above, including the depletion allowance and the recognition of capital expenditure as revenue expenditure. As a result, the capital expenditure involved in the exploration of oil or gas is allowed in deduction immediately for the holders of the participation units, thereby reducing their taxable income from any source. The second benefit is the timing of the recognition of the cost of acquisition of the unit. While the holder of the participation unit is entitled to deduct the cost of investment from his income in the years of holding of the unit against any other source of income, to the extent that the partnership incurs losses, the holder of an ordinary share may only recognize the cost of the share upon its disposal.

These benefits that are granted to the public that invests in the oil and gas industry are not granted to the public holding other shares that are traded on the Stock Exchange. Consequently, this benefit significantly facilitates the raising of capital on the Stock Exchange for the purpose of financing gas and oil explorations.

B. The Aggregate Effect of the Special Conditions on the Income of the State - Comparison to an Ordinary Tax System

As demonstrated so far, the activity in the oil and gas industry is carried out under many unique fiscal conditions. Some of these conditions often require the entities operating in the industry to pay higher receipts than those existing in other industries of the economy, whereas others reduce the volume of the payment required in relation to the ordinary tax system. These are explained, on the one

hand, by the state's duty to demand consideration for the exploitation of the public resource and, on the other hand, by the state's interest to encourage the exploration and development of deposits. The fiscal tools that obligate the entities operating in the industry to make additional payments are the royalties and the fees. As we have seen, the volume of the fees is negligible and therefore, in practice, the additional payment obligations are effected solely through royalties.

In opposition to the royalties, a variety of positive incentives are offered to the industry in the form of various tax benefits: the recognition of capital expenditure as revenue expenditure, the depletion allowance, the Participation Units Regulations, the recognition of land acquisition costs and exemption from customs duty and purchase taxes. As aforementioned, these benefits are of great economic value: they decrease the payment of taxes in respect of activity in the industry, reduce the risk involved in the activity and facilitate the raising of capital that is required for financing such activity.

The majority of the benefits are individual, and therefore may not be quantified into an overall scope of benefits. This depends on the characteristics of the deposit as well as on the manner of its financing and the structure of incorporation of the holders thereof. Accordingly, for reasons of prudence, we will disregard the value of such benefits and examine the rate of GT in Israel, considering the principal components of the system: corporate tax, depletion allowance benefit and royalties. The resulting rate of GT depends on the assumption with respect to the ratio of operating expenses to total turnover, at the actual rate of royalties. The GT rates under the contemplated tax system are expected to range between 24% up to 31% under reasonable assumptions, commencing in 2016.

For the purpose of assessing the extent to which the proposed system compensates the public for its natural resource, we will examine the conduct of the system existing in the industry in relation to the ordinary fiscal system that is applied in most sectors of the economy. This will be achieved by examining the

aggregate effect of the two principal components that are unique to the industry: royalties and the depletion allowance.

The analysis presented below will show that, under reasonable assumptions, the existing fiscal system could result in a situation where a company operating in the oil and gas industry is not required to make an additional payment to the state in excess of the payment that would have been required under the ordinary fiscal system, i.e. had it not been exploiting public natural resources to generate its income. This, as aforesaid, without taking into consideration the additional tax benefits.

For purposes of the comparison we will use a simple model that simulates the cash flow in a given year and compares the volume of the state's income in respect of activity under the fiscal conditions currently existing in the oil and gas industry and the volume of the receipts that would have been received from such activity had it been conducted under ordinary fiscal conditions, which would have been applicable to such activity were it not based on the production and sale of the public's gas and oil resources. The difference between the state's share in each of the two cases reflects the payment that an entity operating in the oil and gas exploration industry would be required to transfer to the state by virtue of its income being generated in exploitation of the natural resources that are owned by the public.

It should be noted that the example presented below is an individual case and, accordingly, different basic assumptions could result in different results.

The assumptions used in the example are as follows:

- **Deduction in respect of expenses:** as long as the amount of deductions from the project in the tax year are sufficiently low to enable the full utilization of the depletion allowance, the amount of such deductions has no impact on the results of the example. For purposes of the example, we will assume that, other than the depletion allowance, there is no difference between the overall deductions in an ordinary tax system and in the tax

system applicable to the oil industry. In this example, we assumed that these amount to 20% of turnover.

- **Royalties:** the rate of royalties as a percentage of turnover depends on the method of calculation of the value of the gas at the wellhead and on the ratio of the costs deducted to turnover. In this example, we assumed that the royalties' amount to 11% of turnover, similarly to the actual rate received in the Yam Thetis project. This assumption, too, has no material effect on the results of the demonstration.
- **Weighted tax rate:** the tax rate that is applicable to the partners in projects for the production of gas and oil varies based on their identity. There are three main groups of tax payers that are partners in such projects: Israeli companies, foreign companies and individuals, which are partners in the project through the holding of participation units. The table presents a theoretical individual case that is based on the tax rates in 2010 and on assumptions with respect to the composition of ownership, based on details of the partnership therein - 70% of the tax payers are companies that are subject to tax at the rate of 25%, and 30% are individuals who are subject to maximum marginal tax (at the rate of 45%). This results in a weighted tax rate of 31%.

Simulation of an ordinary tax system as compared to a tax system in the gas and oil industry (under the aforementioned assumptions):

		Tax System in the Gas and Oil Industry	Ordinary Tax System
1	Income	100	100
2	Various expenses/ deductions	(20)	(20)
3	Royalties (effective rate of the selling price - not at the wellhead)	(11)	
4	Depletion allowance {((1)-(3))*27.5%}	(24.5)	
5	Taxable income base {(1)-(2)-(3)-(4)}	44.5	80.0
6	Payment of corporate tax and income tax (at an average rate of 31%) {(5) * 31%}	(14)	(25)
7	Total payment to the State {(3)+(6)}	25	25
	Total payment as a percentage of profit {7/(1-2)}	31%	31%

Explanation of the table above:

- The left-hand column (ordinary tax system): if the income is 100 and the expenses/deductions are 20, then the taxable income base is 80.

Assuming that the weighted tax rate charged of the operation is 31%, the amount of tax payment required of the company is 25.

- The right-hand column (the existing tax system in the oil and gas industry): the operation in the oil industry is liable for the payment of royalties, but on the other hand is eligible to two deductions that are not available under the ordinary tax system. The first is the deduction of the royalties themselves which, since they are not paid under the ordinary tax system they cannot be deducted under such system. The second is the depletion allowance. In the above example the rate of royalties is 11, the amount of the depletion allowance is 24.5 and the weighted tax rate is 31%. The tax saving resulting from these two deductions is $31\% * (11 + 24.5)$, an amount that approximates 11, which, as aforesaid, is the rate of royalties. Hence, the overall payment required of an operation in the oil industry under a weighted tax rate of 31% equals that required of an ordinary operation under the same weighted tax rate.

The above example proves the existence of a case whereunder a partnership operating in the oil industry is not required to make any payment in excess of the amount that it would have been required to pay had it generated its income without exploiting the public's depleting gas and oil reservoirs or, alternatively, had it owned the gas deposits from the outset.

Under the assumptions of the example, the payment that partnerships that are engaged in oil and gas explorations are required to transfer to the State does not reflect in any way the public's ownership of its natural resources. The amount of such payment is equal to the payment that would have been required if the partnership were not exploiting the natural resources of the public - or alternatively, if it had owned the resource from the outset. The example clarifies and demonstrates that under the existing fiscal system, the volume of tax and royalty payments by the oil companies may even be lower than the tax rates prevailing in most industries of the economy.

It should be kept in mind that the value of the depletion allowance depends on the rates of tax and the composition of the partners in the venture (as explained in Section 3.1 above) and, as a result, under certain circumstances, the amount of payment by companies operating in the oil industry under the existing system may be higher or lower than the amount of payment that would have been required under the fiscal system applicable to most industries of the economy.

The Theoretical Amounts of Tax from the Yam Thetis Project

We can demonstrate the aforesaid case also based on data for the Yam Thetis project. The calculation presented below does not represent the State's actual income from the Yam Thetis project, since it relates to the taxable income from said project and assumes that it is not off-set by deductions in respect to expenses incurred in other projects. This assumption may not necessarily be the case in a reality where the partnership has additional deposits, in which case the depreciation of expenses in the Yam Thetis project as well as the off- setting of expenses in respect to other projects would have resulted in an actual tax payment on the project that is significantly lower than the theoretical amount of tax. In such event, it is also possible that the depletion allowance had not been fully utilized in said years.

For the purpose of comparing the total payments in the oil exploration industry against the total amount of payments under an ordinary tax system we will be

using the calculation of the depletion allowance as published in a statement of position that was submitted to the Committee and the assumption presented in said statement of position with respect to the composition of partners in the venture, according to which 80% of the project is held by companies and the balance is held by individuals who are subject to a maximum marginal income tax rate¹⁷. We will also use the tax rates that prevailed during the years of operation of the venture.

¹⁷ Details of the holders of the Yam Thetis project and the percentage holding:

Noble Energy (foreign company)	-	47.059%
Delek Drilling (partnership)	-	25.5%
Avner Oil Exploration (partnership)	-	23.0%
Delek Investments (company)	-	4.441%

The rate of royalties paid during said period is presented in the table below: as can be seen, the amount of royalties paid by the partnership during the years 2004-2009 aggregated NIS 649 million.

Year	Royalties (NIS in millions)
2004	56
2005	73
2006	102
2007	120
2008	144
2009	153
Total	649

The table below presents the reduction in the tax liability resulting from the deduction of royalties and the depletion allowance under the assumptions presented to the Committee by the partnerships in the venture (all figures are in millions of NIS):

Year	Corporate tax rate	Individual tax rate	Weighted average of corporate tax and income tax according to the partnership's assumptions	Depletion allowance	Royalties	Reduction in the tax liability resulting from the deduction of royalties and the depletion allowance
2004	35%	49%	38%	130	56	71

2005	34%	49%	37%	175	73	92
2006	31%	49%	35%	246	102	122
2007	29%	48%	33%	277	120	131
2008	27%	47%	31%	337	144	149
2009	26%	46%	30%	333	153	146
Total				1,498	649	710

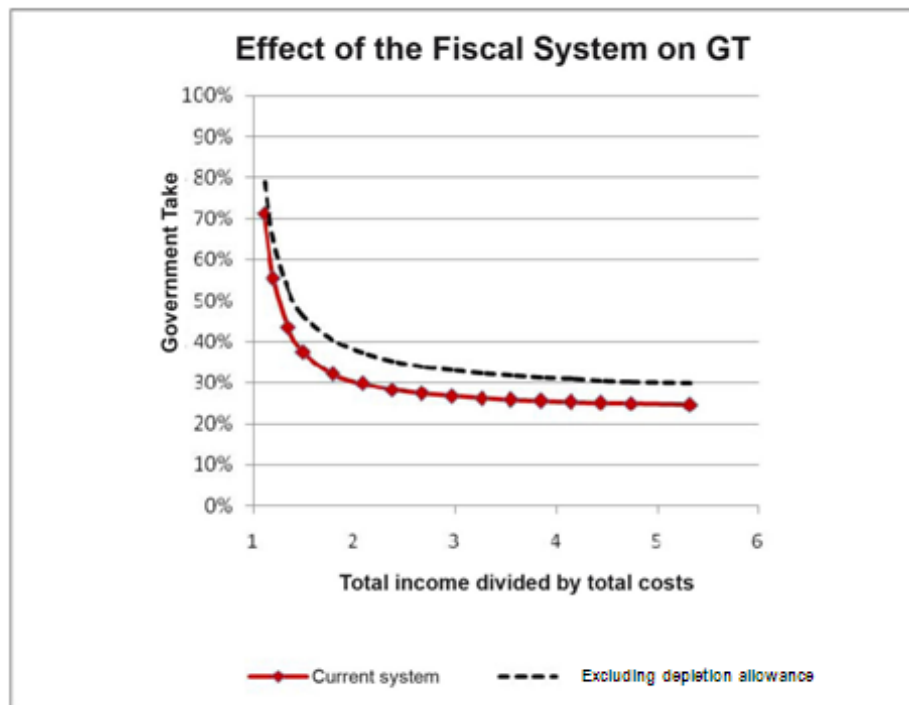
The table above shows that, under the aforementioned assumptions, if the depletion allowance had been fully utilized in each of the years, the deduction from the income tax base in respect of the payment of royalties and in respect of the depletion allowance would together result in the reduction of the tax payment by approximately NIS 710 million.

Consequently, under the assumptions that had been presented to the Committee by the partnership in the Yam Thetis project, the value of the theoretical tax reduction (amounting to NIS 710 million), resulting from the depletion allowance and the payment of royalties exceeds the value of the payment of royalties (NIS 649 million). Hence, if the income from the Yam Thetis project could not have been offset against the other expenses, while all expenses would have been depreciated at rates that would have enabled the project to fully utilize the depletion allowance in each of the years, the aggregate payment transferred to the State from this project would have been lower than the amount that would have been required under the ordinary fiscal system - i.e. if it had not been exploiting the gas resources of the public in generating its income.

It should be noted that this analysis and the additional analyses in the chapter are not aimed at presenting an analysis that is relevant to any specific deposit or to provide focalized criticism, but rather are designated to demonstrate the significance of the existing fiscal environment.

So far, we have examined the existing fiscal system in the oil exploration industry, which is primarily composed of royalties under the Oil Law and tax

benefits under the Income Tax Regulations for the oil industry. In the second part of the chapter, we addressed the economic significance of the system as a whole. As stated above, the existing fiscal system results in receipts in an amount that does not materially differ from that required under the ordinary tax system. Additionally, this system, being based on royalties, does not sufficiently distinguish between gas deposits with a high profitability potential and less profitable gas deposits. The disadvantages of relying exclusively on royalties have been elaborately discussed in Chapter B, and are reflected in the existing system. The following graph demonstrates the insensitivity of the system to the level of profitability of the gas deposits, i.e. the extent of regressiveness of the existing system.



The above graph presents the dependency of the rate of GT (government take) on the profitability level (assuming a corporate tax rate of 18%, as will be applicable in 2016). The horizontal axis presents the ratio of the total income of the project to the total costs of the project. This ratio is indicative of the level of profitability of the project. The vertical axis presents the GT rates. Evidently, the higher the profitability of the project, the lower the GT rate. This situation is unchanged by the exclusion of the depletion allowance component.

C. Comparison of Fiscal Systems

In this part of the chapter, we will perform a comparative examination of the fiscal systems of various countries in which oil and natural gas exploration and production activities are conducted. The purpose of the international comparison is to examine the position of the Israeli fiscal system in the hierarchy of countries, for the purpose of understanding whether the distribution of profits in Israel between the entrepreneurs and the state deviates from the accepted global norm.

In comparing the various countries, we will use a government take - GT index that is indicative of the state's share in the profits deriving from the oil production activity. This index is commonly used in the relevant professional literature in the oil and gas industry. As a rule, the GT index includes the payment of royalties, the corporate tax and designated taxes in the industry. For a comprehensive discussion of GT, including the calculation methodology, the strengths and weaknesses of the index, the weighting of the various fiscal tools and the comparison of the government take in Israel to the government take of gas and oil profits in other countries; see Appendix C to this report. The Appendix also presents an analysis. Accordingly, this chapter will only present a summary of the discussion. As a rule, the GT index includes the payment of royalties, the corporate tax and designated taxes in the industry.

The chart attached on page 54¹⁸ presents the GT in a wide range of countries in which oil activities are conducted. It should be noted that the table is only designated to provide a general demonstration of the extent to which the public's share in gas and oil profits in Israel deviates from the rates prevailing in the world:

The horizontal axis of the chart specifies the GR rate. The right-hand vertical axis specifies the effective rate of royalties (ERR)¹⁹ for each country, which reflects the minimum share of the state in the gross income for each year per given project. This rate weights the rate of royalties as well as royalty-type tools that guarantee to the

¹⁸ Source: Oil & Gas Journal 18 April, 2005 and Appendix C to this report (the adaptation of the graph from the original and the addition of Israel was performed by the original creator).

¹⁹ For elaboration, see Appendix C.

state receipts commencing in the first years of production. In Israel, this rate is 12.5%, relating to the payment of royalties. A royalty rate of 12.5%, as applicable in Israel, is the most commonly used rate of royalties in the world²⁰. It should be noted that, in the majority of countries that apply royalties at this rate, the royalties do not serve as the primary fiscal tool used by the state to receive consideration for the exploitation of the public's natural resources²¹, but rather as part of a fiscal system that also includes designated taxation of the industry.

The left-hand axis of the chart relates to the index that reflects the rate of the state's participation in investments in the industry. In the majority of countries, as in Israel, the country does not participate in investments in oil explorations directly, but only through the granting of incentives²². The different colors attached to each country represent the classification of the fiscal system based on the manner of engagement with the state, as explained in detail in Chapter B to this report. A list of the countries is presented on the left-hand side of the chart - the countries with the greatest GT rate are presented at the bottom of the chart.

The global average of the GT index is estimated at a range of 67% to 72%. The chart demonstrates the fact that Israel is not only distant from the global average, but is also located at the top of the list with the lowest GT, which is estimated at a range of 24% to 31%.

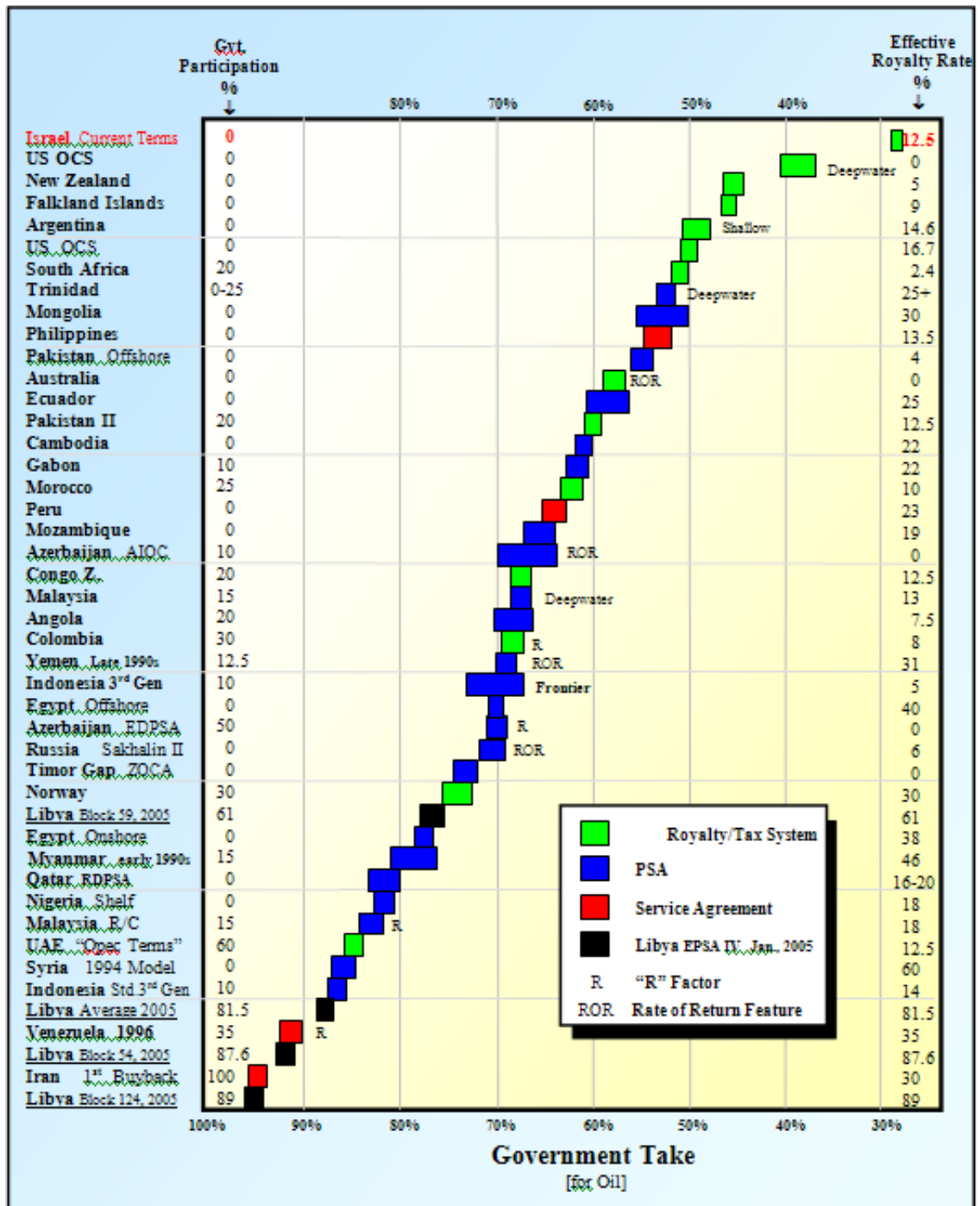
²⁰ Out of a sample of 79 countries that use royalties (in 2001), in 30 of which the rate of royalties was 12.5% - the most common rate in the sample; in 60% of the sampled countries the rate of royalties was between 10%-15%. Data taken from: Daniel Johnston, "International petroleum fiscal system analysis", 2001.

²¹ Among the 30 countries that apply the same rate of royalties as that used in Israel, only two countries (Turkey and Chad) do not use royalties together with an additional fiscal tool, which is specific to the oil industry, for the purpose of increasing the consideration from the production of oil and gas in their territory.

²² The figure concerning the government's participation that appears on the chart indicates different arrangements in different countries. In most cases of government participation that appear on the chart, the government has an option to take part in discoveries that had already been proven to be commercial, with its share in the investment occasionally being paid out of its share in the output of the deposit. The financial outcome is in practice a deferral of the collection of the maximum payment until the full recovery of the investment from the output of the deposit. In other cases, the State participates in investments from the outset of the venture. In Norway, for instance, government participation is effected through a unique investment fund that takes part in the gas and oil ventures that are conducted in its territory. In such cases, the assessment of the State's share does not relate to the income deriving from the government investment, but only to the State's income from the taxation of the share of the private entrepreneurs.

Attention should be paid to the data relating to the continental shelf (OCS) of the United States, which place it, too, at the lower end of the global statistic with GT rates of 43%-50%. It should be noted that in the United States, contrary to the custom in other countries around the world, there is a significant component of bonuses that are not taken into account in the GT statistics. The difficulty of unifying the different forms of payment to the state, which by nature exists in this type of comparison, is exacerbated when bonuses need to be addressed, and therefore, as a rule, these are not taken into account in the GT statistics. For the purpose of weighing the GT in countries where the granting of bonuses is substantial, as is the case in the United States, the overall actual receipts should be examined at their present value. A study published in the mid-1980s shows that, when adding the payment that is made by concessioners in the United States for the receipt of the right to explore for oil in a given area to the statistical data, taking into consideration the present value of such payment, the GT rate in the United States reaches more than 70%²³.

²³ Changing Fiscal Landscape, Daniel Johnston, Oxford Journals, Journal of World Energy Law and Business, K Hendricks R Porter and B Boudreau, "Information, returns, and bidding behavior in OCS auctions: 1953-1969" (1986) J Ind Econ 517-42.



In conducting international comparisons, the question often arises against which countries Israel should be compared. The choice of a reference group is highly significant, since numerous reference groups may be constructed depending on the different criteria used in choosing the countries. This could result in a wide range of results. A recurring argument is that, in analyzing the fiscal system of the oil industry, the State of Israel should only be compared to developed countries or OECD

countries. The Committee has considered this argument and is of the opinion that it is not right to compare the existing and the proposed fiscal system exclusively to said countries, for the following reasons:

- According to EIA²⁴ data, the natural gas potential in Israel is significantly higher than in most OECD countries.
- Most of the operations of international oil companies are conducted in non-OECD countries, and therefore comparison should also be made to such countries, as is also the custom in performing international comparisons in this industry.
- The sample of OECD countries that produce oil and natural gas is limited.
- The opinion submitted to the Committee by an expert in the field suggests that the reference group that is relevant to Israel includes a list of countries, the majority of which are not OECD countries, this, among others, due to the reasons specified above.

Despite the aforesaid, the Committee examined the GT level and realized that the average GT range in OECD countries is 52%-55%²⁵. The list of the countries that comprise this average includes countries with no oil or natural gas potential or with a poor volume of production, such as: the Czech Republic, Greece, Ireland, Portugal, Hungary and South Korea²⁶. Excluding these countries, the fiscal policy of which has little relevance, the average GT range in the OECD is 55%-58%. Even this average range does not exhaust the analysis, since the list of the countries that comprise it includes countries with a minimal oil and gas potential that are not on the global energy map. The list of OECD countries in which oil and gas exploration and production activities are conducted and that have an aggregate gas and oil potential in excess of the equivalent of 200 BCM of natural gas (Israel has a highly probable potential in excess of 650 BCM) is limited and includes only the following countries: Australia, Canada, Denmark, Germany, the Netherlands, Norway, the UK, the United

²⁴ US Energy Information Administration.

²⁵ Based on the data of Daniel Johnston, which had been verified against several additional sources, including prior publications by IHS Cera and the Ernst & Young report: Global Oil and Gas Tax Guide, 2010.

²⁶ Based on statistical data for 2009 published on the EIA website.

States and Israel. The Average GT range in those countries, excluding Israel, is 61%-65%.

This comparison shows, based both on a wide range of countries that produce oil and gas and on a narrow list of OECD countries, that the distribution of profits between the State and the entrepreneurs in the Israeli oil industry deviates from the global norm. Not only is the efficiency of the existing system low, but the share of the public in the State of Israel of the total oil profits is of the lowest in the world, if not the lowest.

CHAPTER D

Description of the Proposed Model

Chapter B reviewed the fiscal tools relevant to the industry that are found in the regimen methods of other Western nations, as well as the various fiscal systems. Chapter C presented the fiscal system for the oil exploration industry currently in effect in the State of Israel, together with the economic implications resulting therefrom and also its place in relation to various fiscal systems around the world. The information and data presented within the framework of these reviews served as the background to the Committee's work in making its examination of the need to change the existing fiscal system. The overviews presented in the previous chapters revealed that the present fiscal conditions in the State of Israel do not give sufficient expression to the fact that the public is the owner of the oil and natural gas resources found within the territory of the State, both when compared to the general tax system practiced in Israel and also when compared to the fiscal systems existing in this industry elsewhere in the world. Looking at the global data along the timeline shows a clear trend of raising the government take from gas and oil resources and the increased progressiveness of fiscal systems.

A. Principles of the Fiscal System

The Committee examined the full array of measures available to the State in order to arrive at a fair and appropriate division of the revenues between the entrepreneurs and the State, both in comparison to what is customary elsewhere in the world and also in relation to the investment required in the exploration and development of the deposits, while maintaining incentives for further investments in exploration and development of gas and oil deposits. In the course of its work, the Committee considered taxation and various receipt measures, through examining the measures implemented by various countries, with the aim of finding the measures most suited to the Israeli economy, in general, and to the existing characteristics of the oil resources industry in

Israel, in particular. The Committee defined several main parameters in the light of which the various measures are to be examined, and accordingly will recommend below the relevant measures.

Described first in this chapter are the main parameters in the light of which the fiscal system of the oil and natural gas exploration industry are to be examined and in light of which the fiscal system proposed by the Committee is presented. In general, it can be said that the desired fiscal system is one that, on the one hand, ensures an appropriate and fair compensation to the public for the exploitation of its natural resources and, on the other hand, provides economic incentives to those engaged in the industry, in such a way as to enable them to obtain the required return on their investments, thereby ensuring the continued development of the gas market. A desirable fiscal system is one that balances these two objectives, with the least possible distortion to the economic incentives of the entrepreneur.

In determining the fiscal system to be proposed, the Committee set itself the following objective: ensuring the continued development of the gas sector, while simultaneously ensuring the receipt of a fair share for the public with respect to the exploitation of publicly owned natural resources and also providing suitable incentives for those engaged in the industry.

As stated, the characteristics desired of a fiscal system will first be presented:

1. Appropriate Compensation for the Public

Oil resources are a publicly owned asset, even when their location is unknown. The production thereof, constitutes the use of a perishable resource. If the public does not receive proper compensation out of the revenues resulting from the sale of the gas, it is in practice distributing its resources for no cost.

The current tax burden on all business activity in Israel embodies a division of the profit generated between the State and the business companies in the event that no use is made of the public's oil resources for the purpose of generating the profits. The situation that exists when natural gas and oil are produced is fundamentally different and therefore the proper compensation to the public is a compensation that is necessarily higher than the rate of this tax. As a basis for comparison and for assessing the public's fair share, what is customary in the various countries around the world can be examined, and particularly in those countries that have general economic or gas industry characteristics similar to those of Israel.

2. Efficiency

The taxation on an economic activity, including the payment of royalties, in most cases results in a distortion of the pricing system as viewed by the individual or, in this case, the investor in gas and oil exploration. In most cases, such distortion is a necessary evil inherent in every tax system. The desired tax system is one that results in the least distortion in making the economic decisions by the individual. For example, a tax system might encourage the making of investments whose economic efficiency, were it not for the existence of the tax system, would not justify their being made, and on the other hand, it might discourage other investments. It should be noted that this principle might clash with other economic principles and thus needs to be weighed up within the framework of the overall considerations when selecting the proper fiscal system.

3. Neutrality for Investment Decisions

The desired fiscal system should have the smallest possible effect on the considerations of the entrepreneur with regard to the question of whether to invest in the exploration and development of gas deposits. A fiscal system that imposes high payments to the state on the entrepreneur, even in a situation where the scope of the revenues from the natural resource will be relatively small in relation to the overall investment, is likely to have a considerable effect on the considerations of the entrepreneur with regard to the question of whether to invest the initial capital required. Neutrality of the investment decision is an individual instance of the economic efficiency characteristic, but it carries considerable weight in certain industries, such as the gas and oil exploration industry where the initial required investment is relatively high.

4. Progressiveness

A progressive tax system is a tax system in which the rate of tax increases as the tax basis (the profit, in this instance) grows larger. The gas and oil exploration industry, like every other economic sector, consists of ventures having different levels of profitability, and thus has a different degree of appeal from the point of view of the investor. The desired fiscal system is a progressive system which, on the one hand, will allow the desired profitability on marginal economic activity to be maintained (for example, investments in developing small and complex deep-water gas deposits), while, on the other hand allowing higher receipts to be collected on the economic activities with the highest return, such return being derived from the production of resources belonging to the public, such as the production of gas from large-scale drillings.

5. Flexibility and Stability

Gas and oil exploration and production activity does not take place in a vacuum. It occurs within an overall array of economic and other conditions, which can frequently vary. As can be learned from the past, the economic conditions (including global energy prices, selling prices, costs and financing terms) are subject to sharp market fluctuations and uncertainty. Thus for example, the prices of natural gas can vary in accordance with the equilibrium created in the market. This equilibrium is primarily local, and in fact there are different prices for this product in various countries around the world. Estimates regarding the quantity of gas or oil can also vary during the course of the exploration stage and, as happened with the “Tamar” discovery, the quantity can be double or more of the initial expectations of the entrepreneur at the beginning of the development process. Accordingly, the system needs to be sufficiently flexible to cope with unexpected changes, both in the macro-economic conditions and in the specific market conditions of the energy industry, without there being a need to make revisions or changes in the characteristics of the system. The system needs to safeguard the proper division of the revenues derived from the production of the

natural resource, between the state and the entrepreneurs, in the widest possible variety of economic conditions. The flexibility of the system will prevent changes having to be made in the future and will ensure fiscal stability, which is of considerable importance to both investors and the state alike.

6. Applicability from the Financing Aspect

It is both possible and proper to test the feasibility of the investment in a project according to the overall return generated therefrom over the project's lifetime and the net present value (NPV) that it creates. Nevertheless, the desired fiscal system needs to also take into consideration the activity's financing characteristics in terms of the industry itself, particularly in the case of the oil and gas industry that is characterized by especially high investments. In a large number of cases throughout the world, investments in ventures in the oil and gas industry are financed from the equity of oil companies. In Israel, due to the fact that the industry is young and based on partnerships having limited equity, there is a need for large-scale bank financing in order to finance the development of the deposits. In light of the characteristics of the activity, the banking system attaches ultimate importance to the ability of the borrowing venture to meet a defined, fixed and predetermined repayment schedule, within the framework of which the debt to the banking system will begin to be repaid immediately upon the commencement of production activity in the project. Furthermore, for reasons of prudence, the banking system requires that the free cash flows of the venture during each year of the financing period be significantly greater than those required to service the debt. A project which is unable to meet the aforementioned repayment schedule will accrue ever-increasing interest, which will burden the activity and might even, in certain instances, force the entrepreneurs to forfeit ownership of the project in favor of the lenders. In light of the aforesaid, the tax system that is appropriate for a capital-intensive industry, such as the oil and gas exploration and production industry, particularly in the case of deep-water gas deposits, is one that does not significantly deplete the project's cash flows during its initial years.

7. Applicability to, and Compatibility with, the Existing Fiscal Policy and Reliance on Fiscal Tools Employed around the World

The question placed before the Committee is primarily an academic question, and the issue thereof is thrown into sharper relief in light of the necessity for a rapid conversion from the present fiscal system to that proposed. Therefore, the Committee also took into account applicability considerations of the proposed system, both from the aspect of its enforcement and collection capability, and as regarding its compatibility with the incorporation structure of the industry in Israel (that is, partnerships, companies and foreign companies) and the desirable level of government involvement in entrepreneurial activity carried out by the private sector (that is, licensing concessionary method). Moreover, the Committee reviewed fiscal tools that are employed by oil and gas-producing countries around the world, with the aim of not having to reinvent the wheel and of making use of tools that have been tried and tested in the industry.

B. Components of the Proposed Fiscal System

In accordance with the objectives of the fiscal system and the guiding principles as presented above, and based on an analysis of fiscal systems that exist in different countries and on the limited experience gained in Israel during the years that the Yam Thetis deposit has been active, the Committee decided to recommend a combined fiscal system. The proposed system for the oil and natural gas exploration industry consists of an array of measures, which together will ensure the further development of Israel's energy industry, by providing appropriate incentives to continue the exploration and production of oil fields, while setting the scope of the government take from the production of natural gas at a rate that constitutes a fair and appropriate compensation to the public for the oil and gas resources that have been placed at the disposal of the entrepreneurs.

The proposed system includes several main components, which will be expanded upon in this chapter:

- **Maintaining the existing rate of royalties**
- **Cancellation of the depletion allowance**
- **Applying accelerated depreciation rates to investments in the industry, while giving flexibility to entrepreneurs**
- **Instituting a designated progressive oil and gas profits levy**

In the opinion of the Committee, combining these components will result in the optimal realization of the aims of the system. The share of the State and the public in the profits from the sale of the natural resource will rise from approximately 30%, as is the current practice, to an average of approximately 52%-62%, depending on a considerable number of factors, including gas prices, the size of the deposits and the level of their profitability. The tax rate and the value of the receipts will vary in accordance with the level of the revenues from the deposit and in accordance with the ratio between the scope of the revenues and the scope of the average investment. This will result in the scope of the receipts payment being smaller for ventures having a low level of profitability, while the public will receive full compensation from

deposits having the highest level of profitability. For deposits with marginal profitability, the effect of the proposed system will be slight compared to the system presently in effect. The proposed system will have a relatively slight effect on the investment decisions of the entrepreneurs, since most of the levy will be imposed on receipts derived from profits and not on receipts intended for the repayment of the cost of investment and for achieving the required return. Likewise, the proposed system will have little effect on the cash flows of gas and oil projects prior to the repayment of the investment and therefore the proposed system does not harm the ability to finance the development of deposits. The proposed system is suited to a broad array of scenarios and responds structurally to changes in the price or the amount of the gas marketed, as well as to varying investment needs. The rates of the proposed levy are progressive, and in practice, compared to the various components of the present tax system, no significant change is expected in the scope of the payments to the State in the initial years of a deposit's activation. The increase in the public's share of the revenues occurs primarily in the second half of a deposit's lifetime and thus does relatively little harm to the ability to repay the debt and further establish the deposit. The proposed system fits into the existing regulatory and fiscal fabric, but requires legislative amendments, as well as various adjustments. The Committee has expressed its opinion with regard to this and has held a series of discussions with professional parties from the industry so as to confirm the practicability of its recommendations.

The Recommendations of the Committee are as Follows:

1. Royalties

To date, royalties have constituted the main fiscal tool in the Israeli fiscal system, reflecting the State's ownership over the oil and gas resources. Unlike taxation on profits, royalties guarantee that the public is compensated for all production of oil and gas resources. Royalty revenues, which are received immediately upon the commencement of production, are easier to forecast and collect and therefore facilitate the proper planning of state revenues. The relatively low rate of the royalties in relation to the total revenue from the sale of the gas and oil allows the development of gas and oil deposits, whose economic return is marginal. Nevertheless, a steep rise in the rate of royalties could harm the feasibility of the investment in some of the deposits and therefore, even though raising the rate of royalties would appear to be an economically justifiable measure for a number of gas deposits, the Committee does not recommend doing so, given the use of alternative fiscal tools to increase the take to be received by the public for the exploitation of its natural resources. As stated, the advantage of royalties is in their uniformity, the simplicity with which they can be collected, and their timing; consequently, in practice, they constitute a uniform lower limit for payment to the public with respect to the exploitation of the oil resources. Accordingly, it is proposed that the rate of royalties charged in Israel on oil and gas resources be left unchanged. The royalties' component, at its present rate, balances the risk inherent in the fact that the public might not benefit from receipts arising from the progressive levy, and thus the two components together create a balanced fiscal mix. The Committee believes that the method for recognizing expenses from the wellhead to arrival at the local shore needs to be clearly defined, so as to ensure that the payment of the royalties is made in accordance with the spirit of the Oil Law and so as to prevent there being a loophole for future manipulations. As presented in Chapters B and C, the rate of royalties currently prevailing in Israel is common in other parts of the world and, in most cases, is used as part of a fiscal system that includes other components.

2. Cancellation of the depletion allowance

The depletion allowance, which originates in the Deduction Regulations, excludes a considerable portion of the profits of companies engaged in the oil industry from corporate tax or income tax. A tax benefit of this kind is unique and has no parallel in any other sector of the Israeli economy. In practice, the depletion deduction constitutes a historical and exceptional tax benefit given to those engaged in the oil and gas exploration industry. Similar to a depreciation deduction, the depletion allowance is also meant to reflect the depletion of the resource in the deposit, and thus the decrease in the value of the asset. However, since no real payment whatsoever has been made for the resource in the deposit, and the depleted asset is publicly owned, there is no justification for this deduction, which constitutes support given to activity in the industry within the framework of a tax benefit. The Committee believes that there is no justification for giving special support to the industry in light of the economic potential inherent in the activity of the industry and the scope of the return to which investors in the industry are expected to be entitled.

As described in Chapter C, due to the tax benefits and especially to the depletion allowance, companies engaged in the oil and gas industry are currently required to pay the State, under reasonable assumptions, an amount similar to the amount that they would be required to pay were they not to exploit the natural resources of the public at all, given that the royalties that they pay are offset by the benefit to which they are entitled within the framework of the depletion allowance. In other words, under these assumptions, the public is not entitled to any compensation with respect to its ownership of the natural resources. However, even if the Committee were to find that the tax benefits, including the depletion allowance, do not in practice cancel out the payment to the public with respect to the oil resources, it is still of the opinion that the depletion allowance benefit should be canceled, since, as stated above, it lacks any economic logic. Moreover, a depletion allowance as a theoretical deduction is incompatible with the principles of the Income Tax Ordinance that permits the deduction of expenses only if they are incurred in the creation of income. The deduction originated in an historical provision, prescribed in 1956, which requires adjustments in accordance with the tax laws in effect, as significantly revised pursuant to amendments to the Income Tax Ordinance over the years. Accordingly, it is proposed that the depletion allowance be canceled, since it constitutes a superfluous deduction.

3. Applying accelerated depreciation rates to investments in the industry, while allowing flexibility to entrepreneurs

As described above, the oil and natural gas exploration industry is a capital-intensive industry that requires large-scale investments at the initial development and setup stages, with a large portion of the financing being dependent on the banking system. In most cases, when bank financing is required for long-term, capital-intensive projects, which are characterized by stable and relatively certain cash inflows, the most usual method of financing is project financing, which is based on the cash inflows expected from the project. In order to finance investments on a major scale, as is required in the oil and natural gas industry; free cash flows are required during the investment repayment period in an amount

equivalent to the anticipated annual repayments, with the addition of a safety margin (coverage ratios). The Committee attached considerable importance to, and discussed at length, the financing aspects of activity in the industry and felt that it is necessary to prevent failure situations, in which gas and oil deposits with commercial production potential and economic feasibility are not developed, or their development is delayed, due to barriers in the financing arena that arise from the industry's fiscal system.

In light of the aforesaid, the Committee recommends that investments in the industry be subject to accelerated depreciation rates, while allowing flexibility to entrepreneurs in determining the scope of the annual depreciation, thereby providing optimal relief with respect to cash flows during the debt repayment years.

The accelerated depreciation proposed by the Committee will be based on the following mechanism:

a. Deduction of costs accumulated in the preliminary permit stage and in the license stage through to announcing the discovery (hereinafter - "pre-discovery costs")

Prior to discovery, costs will be allowed in deduction as an operating expense, as presently prescribed in the Deduction Regulations²⁷. In addition, taxpayers will be given the opportunity to elect between two alternatives with regard to the deduction of these costs:

1. A deduction in the amount of the taxable income (before deduction of the pre-discovery costs) and utilization of the balance of the pre-discovery costs as an expense in the following year.
2. A full deduction of the pre-discovery costs in the current year, as presently allowed.

b. Deduction of costs accumulated in the lease stage

Costs accumulated during the lease stage in developing oil and gas assets will be eligible for accelerated depreciation at a rate of 10%. Taxpayers will be given the opportunity to elect between two alternatives with regard to the amount of the annual deduction:

3. Depreciation in the amount of the taxable income (before deduction of the accelerated depreciation), **but not more than 10%**.
4. Depreciation in the amount of the sum deriving from the accelerated depreciation rate (**10%**).

It should be emphasized that the permitted depreciation deduction in each individual year will not exceed 10%, constituting the accelerated depreciation rate.

²⁷ Refer to Chapter C.

The depreciation, despite there being no actual cash outflow with respect thereto, is recognized as an expense incurred in generating income and therefore constitutes a tax shield for the entrepreneurs. The tax shield reduces the taxable income and thereby makes cash flows available for the purpose of debt repayment. Generally, under company incorporation, when the tax shield is greater than the taxable income in a certain year, the company will recognize a loss and this loss will be available to the company in the following year to be offset against the taxable income. In this manner, the tax shield is fully utilized. As explained in greater detail in Chapter B, this mechanism is slightly different when dealing with incorporation by means of partnerships. Since the partnership is transparent for tax purposes, if the depreciation expenses are greater than the taxable income before deduction of the accelerated depreciation, the loss created at the end of the tax year will be allocated to the partners according to their proportionate shares in the partnership. Under this method, the tax shield will not be available to the partnership in the following year and will therefore not be fully utilized in creating free cash flows at the partnership level. This mechanism could cause difficulties for the partnership in ensuring stable cash flows of a sufficiently broad scope that would enable it to meet the demands of its lenders. Therefore, accelerated depreciation, without allowing flexibility to entrepreneurs, could well be the downfall of gas and oil partnerships, since, during the initial production years, in which their annual income does not embody the full production potential, it is likely that they would be unable to fully utilize the tax shield. Upon applying accelerated depreciation to the industry, whose corporate structure is characterized by a large number of partnerships, it is proposed that the partnerships be allowed flexibility in determining the amount of the annual depreciation expenses. The flexibility in the proposed mechanism will enable the partnerships engaged in this field to determine the depreciation expenses, thereby preventing such expenses from exceeding the taxable income before the depreciation deduction in that year and maximizing the benefits arising from the depreciation.

4. Designated progressive oil and gas profits levy

An efficient fiscal system, which ultimately serves the objectives presented at the beginning of this chapter, needs to contain a levy component that is collected from the economic rent of the natural resources²⁸. Without this component, it is doubtful whether adequate compensation to the public with respect to production of the natural resources can be guaranteed without prejudicing the economic efficiency of activity in the industry. Within the framework of its discussions, the Committee examined several mechanisms whose objective is to cause the transfer to the State of a proper share in the economic rent. Within this framework, tools were selected that are based on the rate of return (ROR) of the investment in the deposit and revenue division mechanisms that are used in various countries around the world. The advantage of the ROR-based mechanisms is their optimal compatibility with the economic characteristics of each individual deposit. Nevertheless, these mechanisms could harm the incentives of the entrepreneur, as well as having an adverse effect on the considerations of the firm with regard to the project's financing structure and the scope of the investments and their timing, as discussed in detail in Chapter B. Having considered the various mechanisms, the Committee decided on the implementation of an R-factor mechanism. As to the differences between the two methods and the considerations in selecting the R-factor method, refer to the explanation within the framework of Chapter B.

The proposed levy is a levy that is collected primarily from the economic rent of the oil and gas deposits and is therefore only applied after the investments in the exploration, development and setup have been fully repaid with the addition of a return, which encompasses, among other things, the risks of the entrepreneur and the necessary financing expenses. Consequently, in practice, this levy will not be collected in the initial years of oil and gas production, but only after a number of years during which the cost of the investment will be repaid. The rate of the proposed levy is not uniform. The rate will be relatively low when the levy is first collected and will be raised as the level of the project's profitability increases. By virtue of this method, projects whose rates of profitability are not especially high

²⁸ Refer to the definition and discussion in Chapter A.

will not pay the maximum rate of the levy and may even be exempt from such levy.

The main advantage of the proposed mechanism is that it allows the state to collect a share of the profits of projects whose feasibility for investors is greater, without harming the incentives of the entrepreneur to invest in projects that might generate a lower return. Moreover, since this is a profits levy, the rate of which is adjusted to the level of the project's profitability, it meets the demand for flexibility which is necessary in order to prevent changes and adjustments having to be made as a result of changes in economic conditions, such as changes in prices in the oil and gas markets, etc. This levy is also more advantageous than other methods for entrepreneurs, since the state participates in the risk of the project, since its take is dependent on profitability, and therefore the cost of financing is not likely to increase. In addition, in contrast to the provisions regarding the deductibility of expenses pursuant to the Income Tax Ordinance and despite the levy being a "post-bottom-line" expense, the levy is allowed as a deduction in calculating the taxable income.

Description of the levy mechanism

The core terms of the levy are detailed below:

- **Levy base – The profits base on which the levy is imposed each and every year.**
- **Levy index – The index that determines the rates of the levy based on the scope of the return on the investment in the project.**
- **Levy rates – The definition of the various levy rates that apply to the different values of the levy index.**
- **Levy limits – The definition of the activity on which the levy is imposed.**

4.1 Levy base

The levy base is the amount on which the levy is collected each year. In this model, the levy base takes into account the project revenues for the tax year, net of the operating expenses and royalties for that year. The levy base is calculated on a cash basis, in other words only revenue and expenditure for which there are cash flows in the current year will be included. Thus, for the purpose of determining the levy base, the full amount of the investments in the year in which they were made is taken into account and that investments are not depreciated over the years in accordance with depreciation rates. It should be noted that the Israeli Tax Authority will be empowered to make the necessary adjustments in order to prevent tax distortions and manipulations in the cash basis.

4.2 Levy index

The levy index is the index that activates the increase in the levy rates in accordance with growth in the project's profits. As referred to above, the index chosen for the oil resources index belongs to the R factor²⁹ family, which expresses the ratio between the cumulative revenue inflows of the project from the date of its commencement and the investments made in its setup, all on a cash basis. At a more detailed level, the index expresses the ratio between the cumulative revenues, net of the cumulative project expenses, cumulative royalties and levy payments in previous years, and the total investments in the development and setup of the exploration project, while assigning a risk factor to the exploration expenses and recognizing normative interest expenses during the setup period, as described below. Thus, this index is closely linked to the repayment period of the entrepreneur's investment. The precise formula of the R-factor is presented below:

²⁹ R– An abbreviation for the term "Ratio".

$$R_t = \frac{\sum_{i=T_2}^t (income_i - opex_i - royalties_i - I_i^{other}) - \sum_{i=T_2}^{t-1} (levy_i)}{2 * I^{exploration} + \sum_{j=T_1}^{T_2} (I_j^{development}) (1 + r_j^{norm})^{T_2-j}}$$

Where:

R_t = The levy index for period t

T_0 = The year that the project commences

T_1 = The discovery year

T_2 = The year that production commences

Income = Revenues

opex = Operating expenses

royalties = Royalties

levy = Oil and gas profits levy

$I^{exploration}$ = Exploration expenses through to discovery

$I^{development}$ = Development and setup expenses

I^{other} = Investments during the period

r^{norm} = Normative interest

Investments in exploration, development and setup, which in most cases precede commercial production from the deposit, will be included in the denominator, while the investments made during the production period will be accounted for in the levy index numerator. In order to also encourage the making of investments that will enhance production efficiency of active deposits, investments that are made during the production period will be immediately deducted from the levy base and the levy index in the year of making the investment, and will not be spread over the years in accordance with depreciation rates, as is the practice under the Income Tax Ordinance in relation to capital investments. In light of the aforesaid, the denominator in the levy index will be "locked" (in other words, it will not be alterable) following the initial investments required for exploration, development and

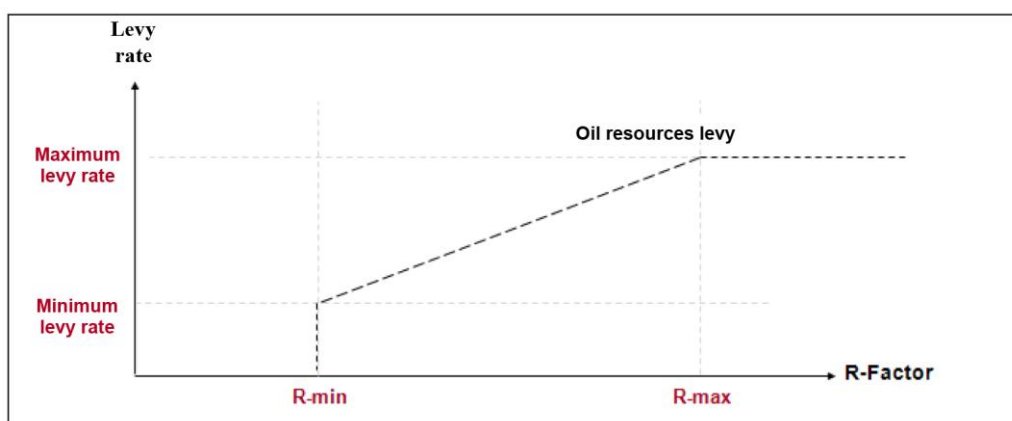
setup. The "locking" mechanism and the timing thereof will be determined by the Israeli Tax Authority, in accordance with, among other things, the data to be provided by the Oil Explorations Commissioner. Subsequent to the "locking" date, all additional expenses and investments will be accounted for in the levy index numerator. It should be noted that initial development investments that overrun beyond the date that production commences, will also be included in the denominator. The Committee recommends that rules be prescribed for adding initial development investments to the denominator subsequent to the commencement of production, particularly insofar as this relates to investments in the development of oil fields, which are likely to be characterized by development investment that continues over the production years of the deposit. Nevertheless, it should be noted that the interest given for the setup period will only be given through to the date that commercial production at the deposit commences.

For the purpose of presenting the model, we will first define the extremity values of the index:

Minimum R factor (R-min) – The minimum index value constitutes the threshold value beyond which the project will be subject to the oil and gas profits levy. Beyond this value, the rate of the levy will gradually rise until the levy index reaches R-max.

Maximum R factor (R-max) – The maximum index value constitutes the threshold value, at which point and thereafter the project will be subject to the oil and gas profits levy at the maximum rate thereof.

Graphic representation of the levy:



4.3 Levy rates

The rate of the proposed levy is not uniform, but varies and is affected by the repayment level of the investment in the project, which constitutes an estimate of the project's profitability level. The more profitable the project, the higher the rates of the levy. The rates of the oil and gas profits levy are activated by means of the levy index, the R-factor. The rate of the levy, at its minimum value, is imposed on a project when the project reaches R-min, and rises linearly as the R-factor index increases until reaching the maximum rate, R-max.

Levy index values and levy rates – setting the values

The levy rates and the appropriate levy index values were set in light of the objectives defined in section 1, including the creation of fiscal conditions that will enable investors to obtain a required return on their investments.

Minimum R-factor (R-min)

The oil and gas profits levy is imposed on the accumulated profits, and therefore is to be applied only after repayment of the investment. However, the value proposed in the model is greater than 1, so as to result in – apart from the repayment of the investment – the entrepreneurs' having normative recognition of the financing costs, as well as a return on the capital invested. Moreover, one of the objectives of the levy is neutrality in investment decisions. In furtherance of this objective, the Committee ran a substantial

number of simulations on deposits at different levels of profitability, in order to determine the threshold value for implementing the levy, so that projects that approximate the feasibility threshold will remain close to the feasibility threshold even after implementation of the levy (alternatively: their return after the levy will not fall below the industry's required return under reasonable economic conditions). The R-min value was set at 1.5. It is important to note that, due to providing a risk factor for the exploration expenses, which increases their weighting in the R-factor formula, as discussed in detail below, the effective R-min rate is even higher than 1.5. Over a broad expanse of varying economic scenarios, this value will enable the attainment of the required return on capital³⁰. At the time of setting this value, the Committee examined the corresponding values in countries where the R-factor index is implemented. Even though the R-factor formula is calculated in a slightly different way in each country, we were able to prove that for every criterion this value is in the correct range and serves the objectives defined above.

Maximum R-factor (R-max)

So as to ensure that the levy at its higher rates is only applied after attaining a profit in excess of the normative profit (in other words, a rate of return in excess of that required in order to justify the investment), the R-max rate was set at 2.3.

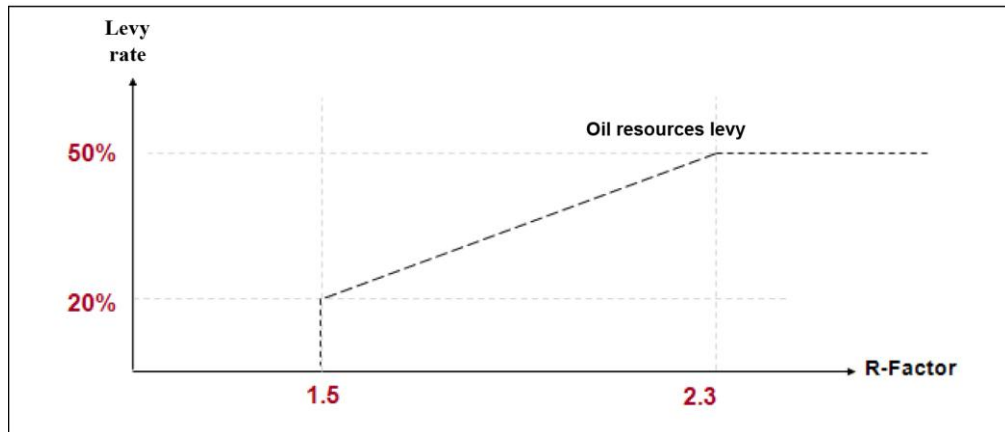
Levy rates

The levy rates have been set in such a way that, at every level of profitability, the entrepreneurs will still have incentives to continue investing in the development of the deposit and its production, even after attaining higher rates of return. The maximum levy rate was determined in such a way that, on the one hand, the State will receive appropriate compensation from deposits having a high level of profitability, while, on the other hand, the entrepreneurs will be entitled to a share of the economic rent. All this will take place while ensuring that the rates of the government take do not fall

³⁰ Refer to Appendix C [*sic*], by Prof. Pindyck.

outside the range generally accepted as reasonable in other parts of the world. The levy rates range from a minimum value of 20% up to a maximum rate of 50%. This range allows for a gradual increase in the tax rates.

Presented below is a graphic representation illustrating the levy rates set by the Committee:



Levy formula

The following table describes the levy formula. The rate of the levy for each value of the levy index can be extrapolated from the formula:

R factor index value	Levy rate (H)
$R < 1.5$	$H = 0\%$
$1.5 < R < 2.3$	$H = 20\% + (R - 1.5) / 0.8 * 30\%$
$R > 2.3$	$H = 50\%$

Principles for determining the parameters in the model

Within the framework of its discussions, the Committee examined numerous issues associated with the manner of calculating the various parameters in the model. Among these issues, the Committee examined, in cooperation with professional staff from the Israel Tax Authority, how to deal with the various expense components that exist over the years of a gas deposit's activity, how to define the boundaries of an economic unit on which the levy is imposed,

and so forth. Following a long series of discussions, the Committee decided on a series of central principles according to which the levy will be calculated. These principles are presented in detail, unless it is unnecessary to do so in order to claim that the full implementation of the model does not require further determinations, most of which will be prescribed by the Israeli Tax Authority in accordance with the powers that it already possesses in any case and those that will be granted to it in the future.

Exploration expenses – Through to discovery

The denominator in the formula of the levy index comprises investments in exploration, development and setup. The levy is imposed only after the levy index reaches a minimum of 1.5. This factor is intended to enable entrepreneurs to attain a required return on their capital, based on the level of risk inherent in the project, and to reflect a normative return with respect to financing expenses. Nevertheless, an investment in exploration holds greater risks than an investment in development and setup, due to the likelihood of failing to discover gas at this stage. Accordingly, in giving a weighting in the denominator to the investment, it is proposed that the weight of the exploration expenses be increased by multiplying them by a risk factor with a value of 2. Thus, in practice, every exploration expense will be multiplied by 3 for the purpose of calculating the levy index. Nonetheless, so as not to create distortions, the increase with regard to exploration expenses exceeding \$100 million is not to exceed 15% of the total real investments in the deposit's exploration, development and setup that are recognized in the levy index denominator. In addition, it should be clarified that exploration expenses within the lease area, incurred after the announcement of a commercial discovery, will be recognized in the numerator and not in the denominator of the levy index.

Normative recognition of the financing costs in the setup period –

Over the course of the setup period through to the commencement of commercial production, recognition of normative financing costs with respect to investments at the setup stage will be added to the expenses in the

R factor denominator. This mechanism is intended to significantly reduce the entrepreneurs' risks should an unanticipated delay occur during the setup period, by providing compensation for the increase in the financing costs, thereby focusing the levy more sharply on the excess profits.

The recognition of the normative financing costs will be done in the following manner:

In each of the setup years, through to the commencement of production, an amount will be added to the setup costs that is equivalent to the product arrived at by multiplying the weighted normative interest, according to the timing of the expense, by the total cumulative investments through to the time of calculating the levy index (the interest calculation for each expense will be adjusted in accordance with the time period that has elapsed from when the expense was incurred through to the time of calculating the levy index). The value of the normative interest for the purpose of calculating the levy will be determined at the beginning of each one of the years in the setup period and will consist of the average annual LIBOR rate (LIBOR³¹) in the preceding six months, with the addition of a fixed 3% premium.

The objective of the aforementioned mechanism is to mitigate the risks of the entrepreneur in the setup period, which might arise from unanticipated delays in setting up the project. The setup period is the period in which the risk level is relatively high, which is reflected in high financing costs, and thus delays during this period could place a heavy financial burden on the project and could adversely affect the return therefrom. Recognition of normative financing costs significantly reduces the economic implication of the risk of failing to meet timetables during the setup period, thereby increasing the appeal of the project. The simulations that were run reveal that, given a delay of 2-3 years in the setup stage of the project, the proposed mechanism would result in the commencement date for collecting the levy being deferred for an average of two years in relation to the date of commencing production, as

³¹ LIBOR – London Interbank Offered Rate.

well as to a significant improvement in the economic parameters at the time of its application.

The Committee recommends that the mechanism for the normative recognition of financing costs in the setup period should be an alternative mechanism, at the discretion of the entrepreneurs, within the framework of which additional expenses of up to \$ 100 million will be recognized for the purpose of calculating the levy. This option is intended first and foremost for deposits with a short setup period prior to the commencement of production and for deposits whose initial setup costs overrun beyond the commencement of production.

Financing costs –

For the purpose of avoiding the distortion of the considerations of the entrepreneurs on the question of whether to finance the project by means of equity or by means of outside capital (debt), and due to the fact that the levy is applied only after repayment of the investment and that it even enables a valid return to be attained on the investment, by means of using the opening R-factor of 1.5, the financing expenses are not included in calculating the levy base or in calculating the levy index, although, and as referred to above, normative financing expenses will be recognized during the setup period.

Depreciation expenses –

Investments are recognized in the levy base and in the levy index on a cash basis and, therefore, the depreciation expenses with respect thereto will not be taken into account in the levy base and in the levy index in the years following the investment, since the full amount of each investment is allowable in the year in which it is paid for.

4.4 Levy limits (ring-fence)

An oil resources levy differs, both in essence and in the way it is calculated, from a profit tax, such as corporate tax or income tax, since its aim is to collect a share of the economic rent arising from each deposit in its own right. Accordingly, in calculating the levy base and the levy index, it will not be possible to redirect revenues and/or expenses from or to other activities, including other activities in the oil sector, such as the development of other deposits, other initial exploration expenses, and so forth. The effect of this limitation is doubled due to the fact that, in light of the implementation of the levy, tax liabilities or the tax burden on a taxpayer in the oil exploration industry, with respect to its activity in the industry, will be different from its liability with respect to other activities. Furthermore, due to the progressive nature of the levy, the tax liabilities of the taxpayer with respect to one oil deposit will be different from its liabilities with respect to another oil deposit.

The levy will be imposed on each deposit separately pursuant to the grant of a lease by the Oil Explorations Commissioner. Every project defined as falling under a particular lease will be treated as a taxable entity for the purpose of calculating the levy and will be required to comply with reporting obligations and to submit reports as determined by the director general of the Israeli Tax Authority. The obligation to pay the levy will be imposed on the holders of the lease in accordance with their proportionate shares in the lease. The director general of the Israeli Tax Authority will be granted powers to prevent the redirection of investments and expenses between leases. The levy base and the levy index will only take into account the expenses and revenues pertaining to the development of a deposit within an area covered by the lease and pertaining to the sale of gas from the deposit. Nevertheless, in order to improve exploration efficiency, all exploration expenses pertaining to the license from which the lease for the producing deposit was derived, even if some of those expenses did not result directly in the creation of income, will be recognized for the purpose of calculating the levy index and the levy base for this deposit, even if some of those expenses related to failed explorations. In the event of there being more than one discovery in

relation to a single license and the license being split into more than one lease for this reason, the exploration expenses will be attributed to the leases in accordance with the decision of the Israeli Tax Authority, pursuant to criteria to be determined. The opportunity to include all the exploration expenses that were incurred by virtue of the license enables the broad recognition of exploration expenses, which is of particular importance in the development of on-land oil fields where numerous exploratory drillings are frequently made prior to receiving a lease.

With regard to the levy limits and the economic activity to which the levy will be applied, no other segments in the value chain will be included other than the exploration and production segments. If the producing company is active in another segment in the value chain (forward vertical integration), the activity in the additional segment will be treated as a separate activity and, as such, the levy rules will not apply to it, and its revenues, investments and expenses will not be taken into account in the levy base and in the levy index. Additional segments in the value chain include, among others, investments in electricity generation plants, LNG facilities or gas export pipelines (in this context, the cost of the pipeline will be allowed up to an amount that does not exceed the cost of laying a pipeline to the coast of Israel). The aim of the levy is to collect a share of the economic rent pertaining solely to the oil resources, and therefore, as a result, the levy will not be imposed on profits pertaining to other activities in the gas and oil value chain, as detailed above.

When export activity is conducted through LNG facilities or by any other means, the levy will be collected on the value of the gas upon its transfer to the export facility, and this facility will not constitute part of the project to which the levy is applied. The Israeli Tax Authority will retain the right to determine transfer prices for calculating the price of gas on leaving the deposit to reaching the export facility. These prices will be determined, among others, in accordance with the following components:

- Gas prices on the local market, net of the cost of investment needed for the transport of the gas from the export facility to the local shore
- Global market prices for natural gas
- The shadow price for the deposit
- An acceptable return on the downstream facilities.

In addition, the Committee is proposing to examine additional means to determine the transfer price and to ensure a proper return for the State from the gas that is exported, including the right of first refusal for the purchase of gas by the State at the transfer price proposed by the leaseholder.

Management fees and payments between related parties (partners) –

Management expenses that are paid by one partner to another in the same project will be eliminated for the purpose of calculating the levy base and the levy index. For this purpose, management expenses that are paid by the partners to the project operator as operator's fees will not be recognized. The partners are to settle accounts with the operator at the partner level, and not as a payment of the project. For this purpose, the Israeli Tax Authority will prescribe the way in which the operating expenses are to be recognized.

Deduction of overriding royalties and other expenses paid by the partnership to third parties or to one of the partners –

The provisions of the partnership agreement and other agreements between the various parties relating to the project and/or to the partnership are the basis for various payments that are paid to the partners and/or to third parties,

which constitute, in practice, the participation of those parties in the profits arising from the gas and oil production. Since one of the aims of the levy is to collect a proper share of the profits arising from the production of oil and natural gas, the Committee felt that it would be correct to impose the levy, while examining the nature of the payments made by the partnership and in accordance with, inter alia, the division of the partnership's revenues and/or profits, as referred to above. Accordingly, the Committee is proposing that the recipients of payments, such as those described above, be charged with the levy at a rate determined in accordance with the R-factor formula of the project generating the payment. This charge will be executed by means of a withholding made by the payor.

Usage fees –

Revenues from usage fees with respect to shared facilities whose cost was allowed as an expense in calculating the levy, which will be paid by third parties, will represent part of the revenue turnover for the purpose of the levy and will be taken into account in calculating the levy base and the levy index.

Revenues from the sale of project assets –

Revenues derived from the sale of project assets will be treated as revenue in the levy base and in the levy index.

4.5 Additional definitions for the oil resources levy

4.5.1 Calculation of the levy index on existing projects –

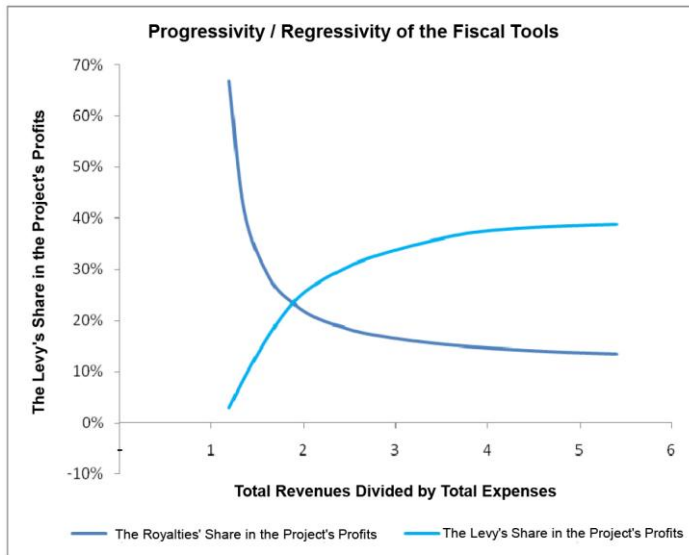
The Israeli Tax Authority will prescribe transitional provisions with regard to the method for reporting activities with respect to the prior years of existing projects, for the purpose of calculating the R-factor.

4.5.2 Linkage on the levy index –

Revenues and expenses are to be included in the levy index at real prices, in accordance with a linkage basket that is to be determined, in order to take into account the price gap over the years between the expenses and the revenues over the life of the project, which could be several decades.

4. The fiscal mix – Integrating the royalties and the levy

Graph no. 1 below describes the correlation between the profitability level, which is estimated according to the ratio between the net cumulative revenues for the volume of the required investment, and the collection rate as a percentage of the profits of each of the fiscal processes. The graph clearly presents the contrast between the lack of progressivity in royalties and the progressivity of a levy. While royalties constitute a large percentage of the profits when the level of profitability is low, the percentage thereof will decrease as profitability rises; in contrast, the levy as a percentage of profits will increase as profitability rises. Although the use of a progressive tool on its own, as expressed through the use of this levy, provides relief for the entrepreneurs, it reduces the revenues of the state in the initial years. Royalties at a moderate rate constitute a balancing tool, which guarantees minimum revenue for the State already at the outset of production.



C. Examination of the Effectiveness of the Proposed System

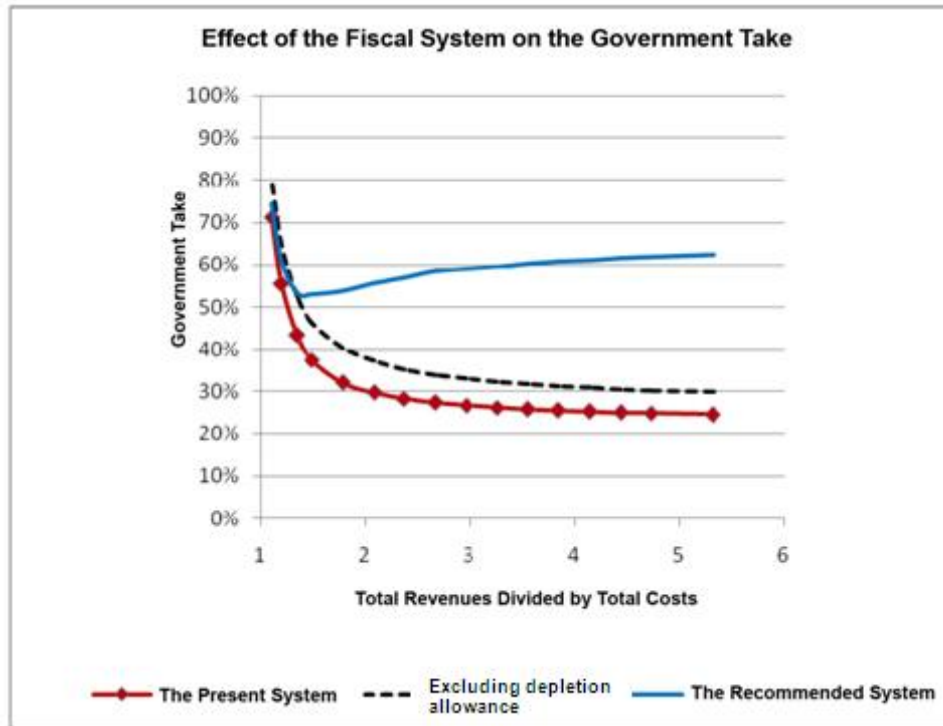
Within the framework of its work, the Committee examined the effect of the array of measures proposed by it on the gas and oil exploration industry. The examination was conducted at different levels and was based both on quantitative tools and on qualitative economic analyses of the proposed tools. The Committee also examined its assumptions and the various analyses in light of the opinions and information presented to it by investors. From among the array of economic parameters that characterize this industry, we shall focus on presenting the effect of the proposed system on three main parameters. The first parameter is the rate of the government take from the profit. This parameter is primarily relevant from the government's point of view. The second parameter to which we will relate is the project's internal rate of return. This parameter is central from the point of view of the investor and provides an indication of the feasibility of the investment and the profit to be attributed to the investors³². The third parameter to be examined is the revenue cash inflows generated by the project. This parameter is of considerable importance in the initial years of the project, during which the cash flows are used to repay the debt financing. This parameter is relevant from the point of view of the investor and the lending parties,

³² It should be noted that in a typical project, where the project IRR is greater than the cost of capital and where the major part of the project is financed by means of debt, the equity IRR is significantly greater than the project IRR.

given the characteristics of each individual deposit. The Committee examined its conclusions in the light of various scenarios with regard to the price of gas, the scope of the deposits, the cost components, the ownership structure and various assumptions with regard to the tax system, as deemed appropriate given the market conditions and as presented to the Committee by the investors. In order to illustrate and clarify the conduct of the economic parameters in a simple way, the models of three deposits will be presented in this report. The difference between these deposits is expressed primarily in their scope. For each of the three deposits, gas prices have been estimated by the Committee according to the characteristics of the existing price level, and the analysis will be presented given an ownership structure that is based on holdings by companies and given the tax rates that will apply from 2016 and thereafter. As stated, these scenarios are merely examples from among the numerous scenarios examined by the Committee.

Effect on the government take from profits:

The following graph presents the effects of the proposed system on the government take, depending on the project's level of profitability. The horizontal axis presents the ratio of the level of project revenues to the investment amount; this ratio constitutes an indication of the project's level of profitability. The vertical axis presents the rate of the government take.



As stated, the example presents the government take as a function of the ratio between the revenues and the costs of the project. As we have already shown, the present system is regressive: the greater the total revenues in relation to the total costs (that is, the greater the profits), the smaller the government take from these profits. Even after canceling the depletion allowance, the system remains regressive. Canceling the depletion allowance slightly increases the government take: a 5%-8% addition for profitable projects. However, even after canceling the depletion allowance, the government take remains close to one third – which is half the global average. The excess profits levy raises the government take significantly in cases where the revenues/costs ratio (which represents an estimate of the profit level) is high. On the other hand, in cases where the level of profitability is relatively low, the government take declines significantly. In projects where the revenues/costs ratio is slightly higher than 1, the gap between the proposed system and the present system almost completely disappears. In practice, the progressiveness embodied in the levy neutralizes the regressiveness inherent in the royalties and thereby prevents the decline in the rate of the government take, especially in the more profitable projects, as occurs under the present system. Under the proposed fiscal system, the rate of the

government take will amount to 52%-62% for a wide variety of deposits and will still be below the global average and below the average for the comparison group of companies with similar natural resource characteristics, as presented in the report by Daniel Johnston³³.

Effect on the feasibility of the investment and on the notional return

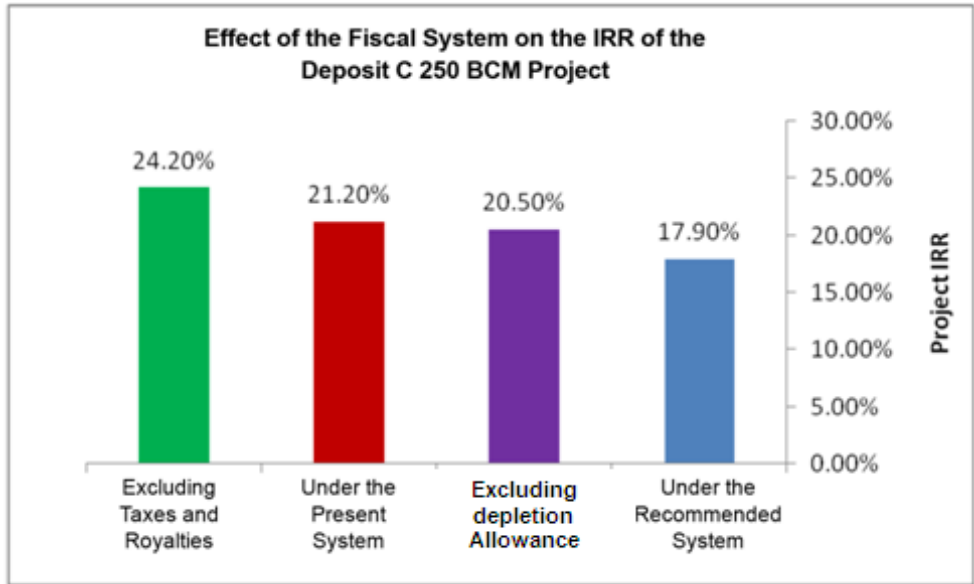
The advantage of a profits-based progressive levy is that it enables the state to collect a significant portion of the economic rent from profitable projects, without materially affecting the economic feasibility of the project whose profitability has been reduced.

We shall demonstrate this characteristic by examining the effect of a model on three deposits: a large deposit with a scope of 250 BCM, a medium deposit with a scope of 100 BCM and a small deposit with the scope of 16 BCM. The size of the small deposit is half the size of the "Mari-B" deposit in the Yam Thetis project, while its setup investment is 1.5 times the size of the investment in the Yam Thetis deposit. The assumptions on which the model is based and its principal results are presented in Appendix E³⁴.

Deposit C – 250 BCM

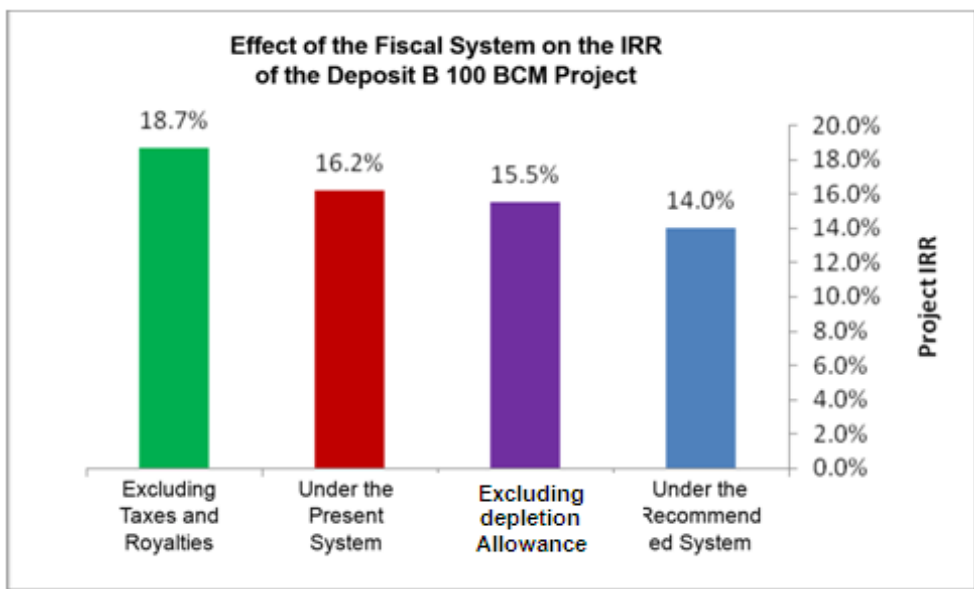
³³ Refer to Appendix C to this report.

³⁴ Refer to Appendix E – Models of Illustrative Deposits.

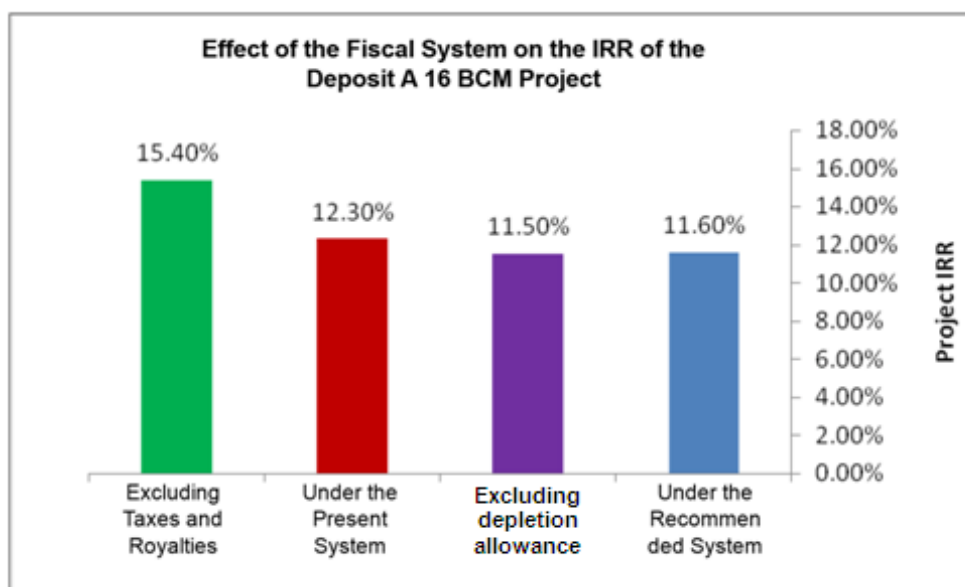


This deposit (250 BCM) is a deposit with a high volume of income and high rates of profitability. The pretax return obtained on the project amounts to approximately 24%. The existing tax system results in a project IRR of approximately 21%. If the proposed system was to be implemented in its entirety, the project IRR would fall to 17.9%. This deposit illustrates the effect of the system on deposits that have a high level of profitability, which is expressed through the cumulative effect of the proposed system on the project IRR. The rate of return that is obtained – 17.9% – is high enough to provide an incentive for investment in this deposit.

Deposit B:



Deposit A:



As stated, the rate of return for Deposit A is not high in relation to the rate required in order to compensate for the industry risk. Likewise, the effect of the excess profits levy on the project IRR is the lowest and is fully offset by the value of the accelerated depreciation benefit. The cumulative effect of the levy and the cancellation of the depletion allowance are also not large and represent a return of approximately 0.7%. This change is small in relation to the effect of the tax components that exist in the present fiscal system.

As can be seen, the royalties and the corporate tax payments under the present fiscal system reduce the project IRR by approximately 3% (from 15.4% to 11.6%). The significance of this is that the increase in the taxes paid by this project is small in relation to the volume of the tax on the project under the present system. In the case of the less profitable deposits, where there is doubt regarding the feasibility of investing in them, it is possible that the effect of the proposed system would be even more limited. This description is only one facet of the differences in the proposed system, which is also expressed in its effect on the cash flows.

Effect on cash flows

Within the framework of the Committee's work, emphasis was placed on ensuring the ability to finance the deposits, given the proposed fiscal system. This is in light of the scope of the investment required to setup the projects and the fact that most of the financing is expected to be provided by the banking system. Several of the features of the proposed fiscal system are being implemented for the purpose of achieving this objective, including the accelerated depreciation system, the recognition of interest during the setup period, setting the minimum R factor at a rate of 1.5 of the total investment and prescribing that the levy should be a progressive levy. All of the above result in the fact that over a relatively large number of years, which in most cases covers the date for repayment of the loan, under reasonable assumptions, there will be only minimal changes to the cash flows in comparison to the present fiscal system (details regarding this topic are presented in Appendix E and Chapter F).

The effect of the proposed system on the cumulative cash flows of the three projects of different types is presented in Appendix E, through a presentation and illustration of the principal economic parameters. It should also be noted that numerous scenarios exist, as well as many dozens of typical deposits. We have chosen to present three deposits that fall within the existing range of discoveries situated off the shores of Israel.

CHAPTER E

Transitional Provisions

A description of the proposed fiscal system and the proposed taxation model was presented in Chapter D. The Committee recognizes that the process of assimilating the new fiscal system into the activity of a developing industry, such as the oil and gas industry, is not an immediate process; in light of this, the Committee has examined how the transition from the present fiscal system to the proposed fiscal system should be done. Despite the fact that the proposed system is inherently a progressive system, due to its progressive characteristic, the Committee has decided that the transition should take place in stages, and especially so that those engaged in the industry will be given the opportunity to prepare for the implementation of the new fiscal system. The Committee has therefore prescribed provisions for making the transition from the present fiscal system to the proposed fiscal system. In addition, in view of the efforts dedicated to developing the producing deposits and those that are close to the production or development stage, and also the efforts dedicated to the financing arrangements planned for such deposits, the Committee sees fit to propose the implementation of transitional provisions with respect thereto. It is worth noting that when prescribing the transitional provisions, including with regard to the cash flows, the Committee has taken steps, with far-reaching consequences for the benefit of those engaged in the industry, in order to ensure (beyond the bare minimum) that the development plans of existing discoveries may proceed.

A. Principles of the Transitional Provisions

As already noted in Chapter D, the Committee examined the full array of measures available to the State in order to bring about a proper division of the income between the entrepreneurs and the public, both in comparison to what is customary in other parts of the world and also in relation to the investment required in exploring and developing the deposits, while maintaining the incentives for further investments in the exploration and development of gas and oil deposits. Nevertheless, as previously

mentioned, the Committee has deemed it appropriate to prescribe provisions for making the transition from the present system to the proposed system.

This chapter first presents the main parameters in light of which the Committee prescribed the provisions for making the transition from the present fiscal system to the proposed fiscal system for the oil and natural gas exploration industry. Following this, the transition provisions proposed by the Committee are presented.

The transitional provisions have been prescribed in accordance with the following principles:

1. Providing appropriate compensation to the public for the use of the State's perishable natural resources.
2. Provisions for a defined and limited time period, so as to ensure a high level of certainty and stability for the oil and gas industry in Israel.
3. Providing flexibility in the project financing ability – The two central parameters for ensuring the ability to finance projects are the net present value (NPV) of the project and the proportion of free cash flows for debt servicing in relation to the total cash flows generated by the project over the initial production years. Some of the projects in the industry are already at the development stage and the Committee deems it appropriate to ensure that the situation of these projects – from the aspect of financial applicability – will remain stable.
4. Consistency in relation to the proposed fiscal system – The transitional provisions are part of the proposed fiscal system and thus their features and the financial tools provided within the framework of the provisions need to be as close as possible to those defined within the framework of the proposed fiscal system. This is required in order to ensure the applicability of the transitional provisions, both in terms of their enforcement and collection

capability as well as from the point of view of their compatibility with the incorporation structure of the industry in Israel.

B. Components of the Proposed Transitional Provisions

The proposed transitional provisions consist of an array of fixed-term measures, which together will ensure a balanced transition to the new fiscal system.

The proposed transitional provisions include several main components, which will be expanded upon in this chapter. The presentation of the components of the transitional provisions will be made in relation to the proposed fiscal system, which was described in Chapter D. The main components of the transitional provisions are as follows:

- **The gradual implementation of the designated progressive oil and gas profits levy**
- **Applying higher rates of accelerated depreciation to investments in the industry, while providing flexibility for entrepreneurs**

In the opinion of the Committee, the combination of these components will result in a balanced transition from the present system to the proposed system. The take of the State and the public from the profits arising from the sale of a natural resource will fall from 52%-62%, as proposed under the new fiscal system, to an average of 40%-59% within the framework of the transitional provisions, depending on the timing of the development and production. This will result in the payment of a smaller scope of receipts to the State for ventures that are already at the production stage or that will commence production in the coming years, as opposed to deposits whose development will only commence several years hence. Moreover, these components will also result in an increase in the cash flows during the initial production years of those deposits that are to commence production in the coming years. Furthermore, on average, the effect of the proposed system on the cash flows of gas and oil projects, prior to the return of their investment, will result in an improvement in comparison to the present situation, and therefore the proposed system does not impair the financing

ability of deposits about to be developed, and might even improve their debt repayment ability. In this context, it is worth noting that, among other matters, the Committee examined the financing ability of the "Tamar" project.

1. The gradual implementation of the oil and gas profits levy

Within the framework of the transitional provisions, the Committee is proposing to set special levy rates for projects that commenced production before the date of the Committee's establishment and for projects that commenced production after the date of the Committee's establishment, but before the beginning of 2014, in the following manner:

1.1 Projects that commenced production before the date of the Committee's establishment

- Such projects will enter at the bottom of the levy's features, or below this if the level of profitability is below the minimum level of profitability for activating the levy, whereby the initial levy rate that will be applied to them will be the minimum rate in the first year of payment.
- The levy payments that will be required from such deposits will be reduced by 50% for any given levy payment (that is, it will be multiplied by a factor of 0.5), and this will be with respect to their revenues for five years (through to the end of 2015). For example, a deposit that is required to pay \$ 100 million, pursuant to the rules of the levy, will actually pay only half this amount.

1.2 Projects that commenced production before the date of the Committee's establishment, but not later than January 1, 2014

- For such projects, the Committee recommends prescribing that the R-factor rate, which is to be applied in collecting the levy at a rate of 20%, be set at 2 (R-min = 2).
- For the aforesaid projects, the Committee recommends prescribing that the R-factor rate at which the levy will reach its maximum rate, that is 50%, be set at 2.8 (R-max = 2. 8).

2. Applying higher rates of depreciation to investments in the industry, while providing flexibility for entrepreneurs

As was explained in detail in Chapter D, the oil and natural gas exploration industry is a capital-intensive industry that requires large-scale investments at the initial development and production stages, with a significant portion of the financing being dependent on the banking system. As stated above, one of the objectives of the transitional provisions, as viewed by the Committee, is to ensure that there is no impairment to the financing ability of deposits that have reached the development stages, in comparison to the present situation. In order to ensure that this is carried out as quickly as possible, without the need to make significant changes in light of the aforesaid, the Committee recommends that during the transition period, the investments in the industry should be subject to higher depreciation rates than those included in the proposed fiscal system, while providing flexibility for entrepreneurs in determining the scope of the annual depreciation according to the following mechanism:

The depreciation rate on the investments in the industry during the years 2011-2013 will be at a level of 15%. Taxpayers will be given the opportunity to elect between two alternatives with regard to the amount of the annual deduction:

- a. Depreciation in the amount of the taxable income (prior to the deduction of accelerated depreciation).

- b. Depreciation in the amount arising from the rate of accelerated depreciation (**15%**).

This is similar to the mechanism presented in Chapter D above.

Implementation of this recommendation will result in a situation – in the initial production years – whereby the free cash flows for debt servicing of the projects commencing production during the transition period will be, at the least, equivalent to the free cash flows for debt servicing available to them under the present fiscal system.

It should be noted that given these transitional provisions, the Committee believes that from the aspect of financing the development of gas deposits discovered to date, there is nothing to prevent a time schedule that complies with the needs of the Israeli economy, and that the introduction of the fiscal system is progressive, proportional and appropriate.

Chapter F

Existing Deposits

The Committee was not appointed in a vacuum, but rather against the backdrop of the recent gas discoveries offshore Israel. Addressing these discoveries and the effect of the proposed fiscal system on them is at the heart of the Committee's work. Therefore, the Committee's discussions also included comprehensive analyses of the question of the application of the new fiscal system, in terms of the manner, the timing and the scope of its application.

In this Chapter we will discuss the implications of the application of the proposed model on existing deposits, amid a discussion on principal economic parameters from the perspective of the entrepreneurs, the government and the economy as a whole. The discussion on the question of the application of the proposed system on the existing deposits will take place, first and foremost, at the fundamental and economic level, and will address the expected implication of this application on the entrepreneurs and the implication of a failure to implement it on the State's income and on the gas industry. The Committee has taken into consideration the material that was presented to it by the public and by the companies operating in the industry, in the framework of its request for comments on the subject that was made in August, as well as orally and in writing, during the process of hearing the positions that was conducted by the Committee in December, after publication of the interim conclusions draft. The Committee is well aware of the fact that apart from the economic discussion, this issue also raises legal questions. The significance of these questions was deeply discussed during the Committee's discussions and is manifested in the legal opinion attached to this Report³⁵. Therefore, the legal discussion is virtually absent in this Chapter.

³⁵ See Appendix B to this Report.

As was presented in Chapter A, most of the land-shelf area has already been distributed and preliminary exploration permits, licenses and leases have already been issued therein. With regard to the majority of potential deposits, no solid information exists about their geological and economic data, since the exploration process therein has not yet been completed. In the framework of a number of licenses, exploration processes that include seismic surveys and exploratory drillings are being performed and will continue to be performed in the years ahead. In this context, the “Leviathan” deposit should be mentioned, in which exploratory drillings commenced about three months ago and which, to the date of writing of these lines, according to the reports of the project partners to the Stock Exchange, was found to contain producible gas of approximately 453 BCM. Apart from the foregoing, there are five main deposits in Israel that were declared to be commercial discoveries some time ago:

- The Yam Thetis project, which is based on two deposits: The Mari-B deposit, which commenced commercial production in 2004. The deposit contains approximately 30 BCM of producible gas, and to date approximately 17 BCM have been produced.
- The Noa deposit, which was discovered in 1999, is located near the Mari-B deposit. It has not yet been developed and its volume is estimated at approximately 6 BCM.
- The Tamar deposit was declared a discovery in early 2009 and its volume is estimated at approximately 370 BCM, of which at least 240 BCM is producible³⁶. Two drillings have been performed to date in this deposit. Before the drilling, the estimate was that there was a probability of approximately 35% of finding gas in the amount of approximately 107 BCM. The first drilling, whose purpose was to ensure the presence of gas in the deposit, began in November 2009. The cost of the drilling totaled approximately \$150 million. After the results of the first drilling proved that this was a significant commercial discovery, an additional drilling was performed, at a similar cost, with the goal of collecting additional information about the deposit’s characteristics in advance of the preparation of the development plan.

³⁶ This is according to the current estimate of the operator, Noble Energy, whereby 65% of the volume of gas is producible.

- The Dalit deposit was declared as a discovery in 2009. The deposit contains producible gas reserves of approximately 15 BCM. To date, a single exploratory drilling was performed in this deposit and, in the wake of the findings thereof, the deposit was declared a commercial discovery and the investors were issued a lease. It should be noted that the Committee understands that there is a lack of clarity with regard to the date and manner of development of this deposit in the framework of the mentioned lease.
- Rosh Ha'Ayin deposit – was declared a discovery in 2002. Production from the deposit has not yet commenced.

As stated, the Committee has examined the question of the application of the proposed system on existing oil rights. On the fundamental and economic levels, the Committee sees no reason to exclude from the application of the proposed system oil rights that were granted by the State long ago, for the main reasons that shall be detailed hereunder. First, we would like to note that the inclusion of these deposits in the new fiscal system does not, in and of itself, obligate them to pay for past income. Therefore, the discussion of the question of the inclusion of the Yam Thetis deposit in the proposed system, addresses only the future income that is expected to be obtained from this deposit in the years 2011 and thereafter, and has nothing whatsoever to do with income that was obtained in the past from the activity of this deposit. Nevertheless, the Committee does see fit to apply the oil and gas profit levy in a graduated manner, in accordance with the transitional provisions.

As was presented in Chapter A, oil rights have already been granted for most of the economic waters of Israel, and for relevant land area. In the framework of these rights, investments on various orders of magnitude have been made and, apart from the Mari-B deposit, these investments constitute mainly exploration expenses. Therefore, since few available oil rights remain, excluding those that have been granted means, de facto, leaving the existing fiscal system in this industry in its present format for the coming decades and having the public waive its right to the value of the national natural resources.

In general, the very fact that investors have invested sums of money under the terms of the existing fiscal system does not justify the perpetuation of the fiscal system in

the future. Moreover, apart from the Mari-B deposit, which we shall expand upon hereunder, these expenses are dwarfed in relation to the overall cost of the investment required in order to develop the deposits to the point of production. These costs are immeasurably lower than the value of the gas inherent therein, insofar as gas is found therein, since if gas is not found, then no levy will be imposed on them in any case. As was explained at length in Chapter D, the method for calculating the levy index takes the exploration expenses into account, and even grants them excessive weight due to the higher risks involved in these investments as compared to the development investments.

The Committee is aware of the claim whereby the Tamar deposit should be excluded from the proposed system due to its financing problems. The Committee has examined the matter thoroughly and has found that there is no reason to exclude the deposit. The Committee even set up a subcommittee to examine the Tamar deposit's financing capability and economic viability under the new terms and, in this context, it also held a number of meetings with the partnerships and companies that hold the Tamar lease, delving deeply into the financing matters. The Committee believes that its recommendations in no way harm the deposit's development financing capability at the required time and in the required manner. Moreover, the transitional provisions that were set as part of the work of the Committee make it possible for the project to be financed in the manner that was planned from the outset, thereby guaranteeing the deposit's rapid development capability. An analysis of the Tamar deposit's financing capability will be presented later in this Chapter. As explained earlier, although larger sums of money were invested in the Tamar deposit than those invested in the other rights, as was emphasized in the transitional provisions, these sums receive special attention. According to the information in our possession, the value of the gas in the deposit can be estimated at over NIS 130 billion in current values over a period of approximately 30 years. This value is much higher than the volume of the investment that has been made to date. Moreover, according to the anticipated volume of the investment required for setting up the deposit, which is estimated at approximately NIS 11 billion as an initial investment and approximately NIS 5 billion in additional investments throughout the lifetime of the deposit, the anticipated revenue volume from the deposit will yield the entrepreneurs a significant profit. While we do not

have the data to determine the precise volume of the profits, the imaging presented in Appendix E to this Report can shed some light on the potential volume thereof. In the opinion of the members of the Committee, it is unjust to demand that the public waive its rights in a resource on such a significant scale without there being any economic, legal or other need to do so.

The application of the fiscal system to the Tamar deposit, justified as it may be, must not impair the entrepreneurs' ability to finance its development. Therefore, we see fit to also address the claims that were voiced, whereby the change in the fiscal system may lead entrepreneurs to decide not to continue developing the deposit.

The Committee attaches great importance to the deposit's further development as soon as possible, first and foremost in order to meet the needs of the Israeli economy. This essential interest was a guiding light for the Committee, and therefore it examined the proposed arrangement from every angle in order to become convinced that it does not impair the viability of the development of gas deposits in general and of this deposit in particular. To this end, the Committee conducted a comprehensive examination of the issue, based on various assumptions and market conditions, and, in light thereof, it reached the conclusion that these claims are insubstantial.

The Committee examined both the economic viability of developing the deposit and the project's financing capability in respect to its recommendations. In general, a project's financing capability is derived, first and foremost, from its economic viability. The unique economic conditions of the project, its economic viability and its high profit level will be detailed later in this Chapter.

Due to the characteristics of the players operating in Israel's oil and gas industry, the manner in which a significant portion of the Tamar project is expected to be financed, or at least the share of the Israeli partners, is by means of project finance or by means of raising debt from the public. As we noted in Chapter D, project finance means financing against the project's cash flow and, in the short term, against its economic value. This means that the financing is given to the entrepreneurs only shortly before the commencement of the project, i.e. only when there is a very high probability of

receiving the cash flow in accordance with the timing that was set. Project finance is long-term financing, according to the investors in this industry it is financing for a period of up to 10 years, during which the borrower must repay the financing body a proportionate share of the annual cash flow each year, embodying part of the debt principal and financing costs in respect to the said period. For the most part, the borrower needs “margins of safety” in terms of the borrower’s cash flow, and therefore the loan repayment plan is built such that the available cash flow for serving the debt will be significantly higher than the cash flow required for serving the debt. As part of defining the proper fiscal system, the Committee worked to ensure that the cash flow and coverage ratios of the projects in this industry would not be significantly harmed during the debt repayment period. In light of the fact that there are projects that are already in the financial closing stage, the Committee wished to ensure that these projects would be able to be financed in the way that was planned and therefore, when defining the transitional provisions, the Committee worked to ensure that the cash flow and coverage ratios of the projects would not be materially different from those in the existing fiscal system.

The following table presents the cash flows (in \$ billions) of a deposit with an order of magnitude of the Tamar deposit in the first ten years of production, under the existing fiscal system and under the proposed system pursuant to the transitional provisions³⁷:

10	9	8	7	6	5	4	3	2	1		
2022	2021	2020	2019	2018	2017	2016	2015	2014	2013		
0.88	0.88	0.89	0.91	0.92	0.83	0.8	0.65	0.5	0.32	Existing system	Cash Flows
0.66	0.66	0.81	0.89	0.91	0.82	0.81	0.7	0.51	0.32	Transitional provisions	
76%	76%	91%	99%	99%	99%	101%	108%	103%	100%	Transitional	

³⁷ Sample assumptions are: maximum annual production – 8 BCM. Tax rate – 39%. Size of investment - \$3.5 billion including financing expenses until commencement of production. Gas price - \$4.5 / MMBTU. Depreciation rate - 15%. It should be noted that, even under more stringent assumptions, the recommended system that includes the transitional provisions does not harm the cash flow in the years that are relevant to the repayment of the debt relative to the status quo.

											provisions / existing system cash flow ratio	
4.82	4.42	3.98	3.5	2.97	2.39	1.82	1.24	0.72	0.3	Existing system	Cumulative cash flow	
4.61	4.3	3.97	3.53	3.01	2.44	1.88	1.29	0.74	0.30	Transitional provisions		
96%	97%	100%	101%	101%	102%	103%	104%	102%	100%	Transitional provisions / existing system cash flow ratio		

The top two lines present the cash flow of the deposit under the existing system and in the framework of the transitional provisions of the proposed system. The next line shows the change in cash flow of the system in the framework of the transitional provisions as compared to the existing system. The next two lines show the cumulative cash flow rate (discounted at the rate of 8% as at the end of the year preceding the commencement of production) in both the existing system and in the proposed system in the framework of the transitional provisions. The last line shows the change in cumulative cash flow of the system in the framework of the transitional provisions as compared to the existing system. One can see that the project's cash flow, in the framework of the proposed system and under the transitional provisions, during the first ten years of the deposit's production, which are material to the repayment of the debt, did not change significantly and, even in the first years, which are more important to the financing bodies, improved as compared to the cash flow that would have been obtained under the existing fiscal system. In addition, the cumulative cash flow in the framework of the transitional provisions is virtually identical to that of the existing system.

Most of the financing for the Tamar project was granted against its cash flow. As we showed above, the project's cash flow in the first years remained virtually unchanged in the framework of the transitional provisions as compared to the existing system. In order to guarantee that a project like Tamar can be financed, the Committee examined the ability to provide a cash flow at the coverage ratios necessary for financing on the scale and with the characteristics required for oil and gas projects. As aforesaid, the financing bodies require "safety margins" against the provision of financing. The customary term for defining the said margin of safety is DSCR (Debt Service Coverage Ratio), which means the ratio of the cash flow that the project is expected to produce and is available to serve the debt to the debt that must be paid in the same year. The customary coverage ratio in the industry ranges between 1.2 and 1.5. This means that the scope of the debt that an entrepreneur can assume for ten years by means of project finance is approximately two thirds of the available cash flow for serving the debt created by the project. In the example presented above, the DSCR in the existing system, under the assumption of an investment on a scale similar to that in Tamar, leveraging of 75% interest on a debt of 8% and spreading out the debt over a period of 10 years, stands at approximately 1.9³⁸. Under the transitional provisions, this ratio will stand at approximately 1.8. If the spreading out of the debt is limited to a shorter period, the possible coverage ratio in the proposed system with the transitional provisions is even higher than the possible coverage ratio in the existing system. This means that, from a cash flow standpoint, there is nothing to prevent the financing of the project.

As known, the vast majority of the investment is made before commencement of production from the deposit and therefore the entrepreneurs require a significant portion of the capital even before the project finance is obtained and/or debt is raised from the public. The way in which companies finance their operations before obtaining project finance and/or raising debt is by means of equity and bridge loans. Equity is raised by the partnerships by issuing participation units. Bridge loans are raised by companies against the value of the asset against which the loan is made. The accepted bridge loan rate ranges from 30% to 40% of the total investment required,

³⁸ Under the assumption that the repayment scope in each year is adjusted in relation to the cash flow in the same year

with the loans being short-term loans that are subrogated by means of project finance on commencement of production. When a bridge loan is granted, the financing parties customarily take margins of safety with regard to the scope of the financing, but in the absence of a cash flow, the margins of safety are defined in relation to the value of the asset, in a manner similar to that used by banks in giving mortgages. The accepted term in the financing industry for defining the said margins of safety is LTV (loan to value), which means the ratio between the size of the loan and the current value of the project. The smaller this ratio, i.e. the smaller the loan in relation to the value of the asset, the greater the probability of the financing being provided. The LTV ratio in the existing system, under the assumption of a bridge loan in the amount of 30% of the scope of the required investment, is relatively high. Under the transitional provisions of the proposed system, this ratio will stand at a sufficient level and therefore the value of the project for the purpose of financing enables a sufficient “safety net” for providing the financing.

In short, the Committee conducted an in-depth examination of the issue of the financing of the Tamar project. In the opinion of the Committee, there is nothing to prevent the financing of the Tamar project. The characteristics of the proposed system do not significantly harm the project’s cash flow during the debt repayment period and the coverage ratios required by the financing parties.

Another claim that might be made by the investors is that had they faced a decision on whether to invest in the project, given the proposed fiscal terms, they would have chosen not to make this investment. This question is mainly hypothetical and cannot be a decisive consideration used in the decision making process on imposing the levy on the Tamar deposit for the reasons detailed above. Despite the foregoing and despite the fact that the members of the Committee are satisfied with regard to the issue of imposing the levy even without addressing this matter, we have analyzed the issue and, in the wake of this analysis, we believe that this claim is unreasonable from an economic standpoint as well.

First, as stated, the levy is imposed on the surplus profits in excess of the normal yield and does not create an additional risk on the investment. Therefore, if a decision was made to invest in the project according to the existing law, there was no reason to change the decision in light of the proposed change. Moreover, as shall be explained

hereunder, it is unlikely that there is a change for the worse between the profits that were anticipated at the time the decision was made, and the profits that are now anticipated. Hence there is certainly no reason to assume that the decision would have been different, given the proposed terms.

When the decision to invest in the Tamar deposit exploration drilling was made, the outlook faced by the investors was of a 35% chance of finding a producible gas deposit with an average volume of approximately 107 BCM³⁹. As stated, in light of this projection the investors decided to perform the exploratory drilling, and in the wake thereof it became apparent that the volume of the deposit is more than double this estimate. Hence, we will look at the investors' anticipated profits according to this outlook in comparison to the profit that they might have made from the Tamar deposit with its present characteristics and under the proposed fiscal system. Appendix E to the Report presents the cash flow of a deposit similar in order of magnitude to the deposit that the investors expected to find (Deposit B). Alongside it, a deposit similar in order of magnitude to the Tamar deposit (Deposit C) is presented. A comparison between the entrepreneurs' yield from Deposit B in the existing fiscal system and their yield from Deposit C in the proposed fiscal system shows that the investors' yield from the large deposit in the proposed system exceeds their yield from a medium-sized deposit under the existing fiscal system. Moreover, the existing corporate tax rates in the economy and the outline decided upon by the government to continue to reduce them constitute a benefit in relation to the outlook that the investors saw when making the decision to invest in the Tamar deposit. These claims add up to the general claim that was analyzed at length in Chapter D, that the proposed system, in general, does not have a significant effect on the investment considerations of entrepreneurs in this industry.

Another deposit that was declared a commercial discovery is the Dalit deposit. As stated, there is a lack of clarity with regard to the manner of development of this deposit. According to the estimates that were presented to the Committee, the development of this deposit requires substantial investment in relation to the volume of gas found therein. It is possible that, from the viewpoint of the investors, there is a

³⁹ According to the partnership's publications

doubt with regard to the viability of developing the deposit for various reasons, and the main reason might possibly be the extensive oil rights that they hold and the existing oil rights in Tamar in particular. Conversely, the Committee attaches great importance to the development of medium-sized and small deposits such as this deposit, and therefore it recommends the implementation of a tax system that is primarily gradual. As presented in the simulation in Appendix E, the effect of the proposed system on small deposits is moderate. The oil and gas profit levy is expected to be manifested in a deposit of this type only after approximately 14-15 years, and even then its initial rate will be low. Given that the transitional provisions are intended for a deposit whose production will commence in the next few years, the levy on this deposit is expected to apply only after approximately 20 years of production and, as stated, at relatively low rates. Therefore, the Committee believes that the way to guarantee the development of this deposit does not lie in the granting of additional concessions to the deposit in the proposed system.

Up to now, the implications of the application of the system on existing oil rights has been analyzed in principle, amid an in-depth examination of the issue for the deposits that have been declared as commercial discoveries. It should be noted that the Committee attaches considerable importance to the development of gas deposits that have been discovered to date, within a timetable that meets the needs of the economy. In light of the data and comments that were presented to the Committee when the positions of the public were heard, it was decided, as stated, to recommend the implementation of transitional provisions in order to guarantee rapid development of these deposits.

In practice, there is only one deposit –Yam Thetis, from which commercial production has already begun, and therefore a large portion of the economic and data are already known with regard to it. From the data that reached the Committee, inter alia in the opinions that were submitted thereto in the framework of the request for the public's positions⁴⁰, the following findings arise: approximately NIS 2.6 billion⁴¹ has

⁴⁰ See opinion of certified public accountants Shlomo Alpia and Nissim Yehoshua, which was submitted by Delek Energy, Delek Drilling and Avner Oil Exploration

been invested in the deposit, mainly in the initial years of its operation. By the end of 2009, gas valued at approximately NIS 6.4 billion had been produced from this deposit. Net of financing expenses, royalties and current operating expenses, the income stands at over NIS 4.9 billion, almost double the total sum of the investment in the deposit. One can assume that, if we add the cash flow from 2010 to this sum, a higher income flow will be obtained. Although this is pretax flow, from an analysis of the reports that reached us, and from additional analyses that we performed, it is evident that the tax rates that were paid in respect of this project are negligible and therefore their effect on the flow is limited. Had the R-factor been applied to the project, it is not inconceivable that the index value at the end of the year would have been over 20, and therefore this deposit would pay a levy close to the maximum rate. In our estimation, and based on the financial data that we have, the yield on the project already amounts to approximately 15%, although this figure in itself is not of central importance.

Despite the perception created among the public that the deposit may be near its end, in the years ahead this deposit is expected to produce gas at a volume of approximately 13 BCM at the very least. As stated, after the investment in the deposit was recouped and a handsome profit has already been yielded by the investors, most of the income will constitute surplus profit. The remaining financial volume of the deposit is approximately NIS 7 billion and, as stated, a large portion of this sum will be added to the investors' profit. In light of the fact that the investors have already received the required return on their investment, which is higher than that which is customary around the world, and in light of the fact that the economic value of the gas in this deposit is tremendous, the Committee believes that it is right to apply the proposed fiscal change to this deposit, subject to the transitional provisions hereunder, and it should not be excepted. The Committee sees fit to direct the attention of the public to the fact that, at the time the developers decided to develop the Yam Thetis deposit, the corporate tax rate in Israel was 36%. This tax rate is significantly higher than the average tax rate that existed in the market during the deposit's years of operation. This rate is significantly higher than the tax rates that the Company will

⁴¹ We would like to note that this sum is higher than the figures that we are familiar with and might include additional components, but for reasons of prudence we have adhered to the figure that appears in the report that was submitted by the partnership.

pay in the future, which will reach approximately 23% on average in the years 2011-2013. This tax reduction should be beneficial to the investors in the years ahead.

Due to the deposit's great profitability and the income that has already accumulated therein, the levy index of the deposit will apparently stand at the maximum value immediately upon application of the new system. This means the immediate application of the maximum levy rate on the deposit. In light of the above, and due to the desire of the members of the Committee to create a gradual transition to the new fiscal system, the members of the Committee recommend setting interim rules for producing deposits, as detailed in Chapter E.

In the framework of its work, the Committee also discussed Israel's existing land deposits. As at the time of writing, there is one producing deposit in Israel, Tzuk Tamrur, and apart from it, the Rosh Ha' Ayin deposit has been declared a commercial discovery. After the Committee examined the economic data of these deposits, the Committee realized that its conclusions, as they were presented in the framework of the interim report, enable the development of the deposits. Nevertheless, the different characteristics of these deposits in relation to the marine deposits requires focused attention, which was given and clarified in the framework of Chapter D and Chapter E to this Report. This attention is manifested mainly in the following mechanisms:

- Granting the option of including all the exploration expenses that were incurred in the framework of the license in the calculation for determining the basis of the levy, including for exploration expenses that did not directly bring about the granting of the lease
- Expanding the scope of allowable exploration expenses to 15% of production cost, and also setting an alternative limitation of \$100 million for allowable exploration expenses.
- A clarification with regard to the ability to additionally include in the allowable development and setup expenses in the denominator of the R-factor formula, expenses incurred subsequent the commencement of the commercial production of the deposit, provided these are initial and significant development expenses, as shall be determined by the Tax Authority.

- Recognition of financing expenses in the setup period and the provision of an alternative mechanism, as chosen by the entrepreneurs, in which additional expenses in the sum of \$100 million will be recognized for the purpose of calculating the levy. This alternative is intended, first and foremost, for deposits in which the setup period before commencement of production is short.

We believe that the application of these mechanisms will facilitate the development of land deposits and will guarantee a suitable consideration for the investors in these deposits.

Competitiveness in the Gas Industry

The Committee attaches considerable importance to the existence of competition in the industry in general and in the field of natural gas production in particular. The fact that natural gas is a product whose portability requires capital and ongoing investments, as well as the existence of suitable facilities in the markets of origin and the destination market, leads to considerable variance in global gas prices, as a direct result of both the existing demand and supply for gas in various areas of the world and the alternatives available to gas consumers. These alternatives may exist by way of obtaining imported gas in the form of LNG and may be based on other fuels.

The Israeli gas industry is currently based on two main gas suppliers: Egyptian gas, which is exported from Egypt by EMG by means of a marine pipeline and gas from the Yam Thetis deposit. Over the past two years, Egyptian gas has supplied nearly 40% of the gas consumption of the State of Israel, with the remainder being supplied by the Yam Thetis deposit.

The existing competition between the two gas suppliers is of major importance to the Israeli gas industry, since it leads to an improvement in the price of the gas and the terms of supply thereof. These terms of competition led to the signing of gas agreements in 2004 by the Israel Electric Corporation Ltd. at prices that are lower by double-digit figures than those that would have been obtained had there been no competition over gas prices. During the past year, with the increase in the number of electricity consumers and the addition of private electricity producers and industrial

plants, we have witnessed the existence of competition between the two suppliers, in order to guarantee their market shares. Large electricity consumers such as the Israel Electric Corporation Ltd. and others have even chosen to sign gas agreements with each of the suppliers, in order to bring about increased reliability of supply, to reduce their dependence on a single supplier and to increase or reduce the gas consumption volume from each of the entrepreneurs in accordance with the prevailing economic conditions.

An issue that was brought before the Committee during the course of its work centered on the fear of possible damage to competition between the Egyptian gas supplier and the Israeli gas suppliers, due to the application of the Committee's recommendations. EMG, which exports gas from Egypt to Israel, is an Egyptian company and the source of the gas that it exports is from the economic waters of Egypt. That being the case, the fiscal system proposed by the Committee does not pertain to the gas supplied by this company. The question is vice versa, to what degree will the Israeli gas suppliers be able to compete with the Egyptian gas once the proposed fiscal system is applied. First, we would like to note that the Committee's work was performed under assumptions with regard to the gas prices which, to a great extent, correspond to the present gas prices in the Israeli economy and given various scenarios with regard to the rate at which the prices will increase. These gas prices, which constitute competitive prices at present, also guarantee that in the future, after the Committee's recommendations have been implemented, the yield required by Israeli gas companies will be attained. Accordingly, the yield and cash flow data that appear throughout this Report are based on these prices. In other words, the assumption whereby Israeli gas producers will be forced to raise prices in order to make the projects profitable in wake of the Committee's recommendations, is not a necessity, since even at today's price level high yields on the capital can be obtained and the development of projects remains profitable. Any decision on the part of the entrepreneurs to raise prices is not a necessity that stems from the fiscal policy proposed by the Committee. Moreover, the proposed fiscal system pertains, for the most part, to taxation of permit profits and not to taxation of turnover, and therefore the conditions of this competition should not affect the setting of the consumer price of gas.

On a marginal note, and notwithstanding the fact that even without the foregoing in this paragraph one can determine that the recommendations do not harm the competitive capability of local suppliers, it should be noted that the State's receipts from gas and oil resources are higher in most countries around the world, including Egypt, than those in Israel. According to the information in our possession, the rate of the State's receipts in Egypt is high not only relative to the accepted rate in Israel today, but also relative to the fiscal reality in the industry after the application of all the Committee's recommendations. According to the figures presented to the Committee, these rates stand at 70%-80%⁴². This fact is of dual significance; it proves that competition between the gas companies operating under a completely different fiscal policy is indeed possible and that increasing the State's share in the gas receipts in Israel will not create discrimination in the economic conditions that apply to Israeli gas suppliers relative to Egyptian ones. One should also recall the fact that the ability to supply the gas from Egypt to Israel is limited at the technical level, given the existing infrastructure, and at the political level, based on the existing framework agreement between the countries and as a direct result of Egypt's difficulty in meeting all its undertakings with regard to supplying gas. This combination of factors leads to the fact that the Egyptian gas cannot constitute a long-term substitute for gas originating in Israeli deposits and therefore it is doubtful whether it will continue to constitute a competitive product to the Israeli gas.

Changes around the World

After the Committee examined various scenarios and possible effect of the proposed model on the gas deposits for which leases and licenses have been issued, and after it became convinced that there is no justification for excluding them from the proposed system and after it realized that there is no legal impediment preventing the application of the proposed system to them, the Committee examined whether changes of this type are customary in the global industry. As stated, changing economic conditions are a routine matter in this economic sector, and the proposed model also copes well with them. In general, investors in the industry must cope with changes in economic conditions, but due to the fact that the change in these conditions

⁴² See Appendix C to this Report.

stems from the government's activity, we have seen fit to examine the frequency of changes in the fiscal system in the industry on active projects worldwide. Here, too, the Committee found that the proposed policy does not constitute an unusual approach relative to what is customary around the world, and is characteristic of the conduct of many governments.

According to an up to date study⁴³, many countries have recently increased their revenues from gas and oil resources, either by way of increasing royalties, increasing existing tax rates or imposing new taxes (mainly taxes on profits). The countries that changed their taxation policy are developing countries (such as China, India, Algeria, Argentina, Bolivia, Ecuador and Kazakhstan) and developed countries (such as Canada, the United States, Australia, Italy and Russia). In most of these cases, the changes applied to all the companies that operate in the said countries without excluding deposits that are in stages of declaration, development or production. We would like to note that it is evident from the Committee's figures that approximately 20 different countries around the world have made changes to their fiscal systems in this industry, and have applied the proposed change to a wide range of deposits. The table attached hereunder includes a list of 28 changes in the fiscal systems in recent years. We would like to note that some of the changes have not yet been applied and, as stated in the table, there are also countries where the activity of some of the deposits has been excluded. Although the proposed change in the fiscal system in Israel is a sharp change in relation to changes that were made in most of the said countries, this change is necessary due to the low and unusual starting point that exists in Israel. As aforesaid, the endpoint in Israel is also low relative to what is customary around the world. Nevertheless, in order to mitigate the transition, the Committee has decided, as stated, to recommend the application of transitional provisions.

⁴³ WOOD MACKENZIE 2008.

Changes in Fiscal Systems in the Years 2002-2008

Table 1 Changes in Fiscal Terms 2002-2008*

Country	Year	Regime Type	Fiscal Change	Application
Algeria	2006	PSC	Windfall Profits Tax introduced	All PSCs with profit-sharing linked only to production levels
Argentina	2002	Concession	Crude oil export duty introduced	All fields/companies
Argentina	2004	Concession	Crude oil export duty rate increased and gas export duty introduced	All fields/companies
Argentina	2006	Concession	Gas export duty rate increased	All fields/companies
Australia	2008	Concession	Condensate liable to excise tax	NWS gas project; onshore fields
Bolivia	2005	Concession	Royalty rates increased	All PSCs
Bolivia	2006-07	Concession	Contracts overhauled	All PSCs
Canada (Alberta)	2007	Concession	Increased royalty rates	All fields/companies
Canada (Newfoundland)	2007	Concession	Increased royalty rate	Specific new field developments
China	2006	PSC	Windfall Profits Tax introduced	All PSCs
Ecuador	2006	PSC	Windfall Profits Tax introduced	All PSCs
Ecuador	2007	PSC	Windfall Profits Tax rate increased	All PSCs
India	2006	Concession	Increased cess payments	All fields/companies
Italy	2008	Concession	Increased tax rate	All fields/companies
Kazakhstan	2008	PSC	Law passed to allow retroactive changes to PSCs	All PSCs
Nigeria**	2008	PSC	1993 PSC terms under review	1993 PSC (deepwater) contract areas
Papua New Guinea	2008	Concession	Additional Profits Tax re-introduced	PNG LNG project
Russia	2002	Concession	Royalty/tax terms overhauled	All fields/companies
Russia	2003	Concession	MET (royalty) and export duty rates increased	All fields/companies
United Kingdom	2002	Concession	Supplementary Charge (increase in Corporation Tax) introduced	All fields/companies
United Kingdom	2005	Concession	Supplementary Charge increased	All fields/companies
United States (Alaska)	2005	Concession	Production tax rules changed	Prudhoe Bay satellite fields
United States (Alaska)	2006	Concession	Production tax replaced with Profits Tax (PPT)	All fields/companies
United States (Alaska)	2007	Concession	PPT rates increased	All fields/companies
Venezuela	2002-06	PSC (E&P)	Contracts converted to 'empresas mixtas' concessions	All fields/companies
Venezuela	2002-06	Service Contract (Marginal Fields)	Contracts converted to 'empresas mixtas' concessions	All fields/companies
Venezuela	2002-07	Concession (Heavy Oil)	Concessions converted to 'empresas mixtas' concessions	All fields/companies
Venezuela	2008	Concessions	Windfall Profits Tax introduced	All "empresas mixtas"
Vietnam	2008	PSCs	Export duty rate increased (twice)	All post 1993 PSCs

In conclusion, we would like to reiterate that the financial volume of the gas deposits for which oil rights have been granted is extremely high. The value of these deposits is estimated at NIS hundreds of billions, and they apparently constitute the principal gas and oil resources that are expected to be discovered in the coming decades. In the opinion of the members of the Committee, the State should act to receive the necessary receipts, in accordance with the economic principles that were presented in the previous chapters, from these deposits as well, since they could make a significant contribution to the Israeli public over the next 20 years. In the Committee's opinion, the correct way to mitigate the change in the fiscal policy with regard to these deposits is by means of the transitional provisions.

The addressing of the minority opinion by the majority of Committee members

The minority opinion that is attached to this Report deals almost exclusively with guaranteeing the ability to set up and finance the Tamar deposit. With regard to the proposed system and the application thereof to all the other deposits, there is no dispute among the Committee members, apart from a minority opinion with regard to reducing the rate of the maximum levy to approximately 45%, which would mean reducing the GT rate by approximately 3% on average.

This consensus among all the members of the Committee, who are in charge of various aspects in the framework of government policy pertaining to the industry, exposes the immediate need for a change in the fiscal system, significantly increasing the State's share in the profits derived from the natural resources that belong to the State of Israel. With regard to the nature and scope of the proposed mechanisms, there is virtually no dispute, due to the fact that the proposed system is a balanced system which, on the one hand, provides the entrepreneurs with handsome profits and incentives to continue to develop and, on the other hand, reflects the public nature of the said natural resources, all this in accordance with what is customary in countries around the world.

With regard to the minority opinion attached as Appendix A to this Report, this opinion focuses on guaranteeing that the Tamar deposit is set up at the time required for the needs of the economy. Despite the existing dispute on this issue, it should be noted that the Committee has considered the matter at length, and has heard the opinions of the public and held in-depth discussions. The position held by a majority of the members of the Committee is that the mechanisms proposed in the framework of this proposal not only permit the development and financing of the deposit, but also include extensive profit margins whose purpose is to provide the investors with flexibility in selecting the financing method and adapting it to the planned financing outline if necessary. All this in order to guarantee that the application of the

Committee's recommendations, from the investors' perspective, does not lead to any delay in the development of the deposit.

The question of the development of the Tamar deposit at the time required by the needs of the economy does not rest entirely on the shoulders of the Committee. Rather, it is first and foremost a direct result of the investors' decision to meet their planning, including the development plan that they had submitted (after publication of the draft conclusions for comments by the public). We are convinced that from a pure economic perspective, it is right to continue developing the existing deposits, including the Tamar deposit, in accordance with the original development plans, but due to political economy considerations, if decision makers do not expeditiously adopt a clear position, the entrepreneurs may use the delay in the development and the energetic security of the State of Israel as leverage and bargaining card in order to change the recommendations for a proper fiscal system and the maximizing of profits.