Effective Corporate Tax Rates in Israel

Tax regulations have a material impact on our business, particularly in Israel where we have the headquarters or certain our investees. The following summary describes the current tax structure applicable to companies in Israel, with special reference to its effect on us. The following also contains a discussion of government programs from which we, and some of our subsidiaries, benefit. To the extent that the discussion is based on tax legislation that has not been subject to judicial or administrative interpretation, there can be no assurance that the views expressed in the discussion will be accepted by the tax authorities in question.

Corporate Tax

Israeli companies are generally subject to corporate tax on their taxable income. In 2017, the corporate tax rate is 24% (in 2015 and 2016, the corporate tax rate was 26.5% and 25%, respectively) and as of 2018 the corporate tax rate will be 23%. However, the effective tax rate payable by a company that derives income from an Approved Enterprise, a Benefited Enterprise or Preferred Enterprise, as further discussed below, may be considerably less. In addition, Israeli companies are generally subject to tax at the prevailing regular corporate tax rate on their capital gains.

Besides being subject to the general corporate tax rules in Israel, certain of our Israeli subsidiaries have also, from time to time, applied for and received certain grants and tax benefits from, and participate in, programs sponsored by the Government of Israel, as described below.

Taxation of Non-Israeli Subsidiaries Held by an Israeli Parent Company

Non-Israeli subsidiaries of an Israeli parent company are generally subject to tax in their countries of residence under tax laws applicable to them in such countries. Such subsidiaries could also be subject to Israeli corporate tax on their income if they were to be managed and controlled from Israel. In such case, double taxation could ensue unless an applicable tax treaty provides applicable rules for relief from double taxation or such relief is available under internal law.

An Israeli parent company may also be required to include in its income on a current basis, as a deemed dividend, certain income derived by its subsidiaries under the Israeli Controlled Foreign Corporation rules, regardless of whether such income is distributed or not. Under these rules, a non-Israeli subsidiary is considered to be a controlled foreign corporation, if, among other things, a majority of the subsidiary’s means of control are held by Israeli residents, most of its revenues or income is passive (such as interest, dividends, royalties, rental income or income from capital gains) and such income is taxed at a rate that does not exceed 15%. An Israeli parent company that is subject to Israeli taxes on such deemed dividend income, may generally receive a credit for foreign taxes paid by its subsidiaries in their country of residence and for deemed foreign taxes to be withheld upon the actual distribution of such income.

Law for the Encouragement of Industry (Taxes), 5729-1969

The Law for the Encouragement of Industry (Taxes), 5729-1969, or the Industry Encouragement Law, provides certain tax benefits for an “Industrial Company”. Pursuant to the Industry Encouragement Law, a company qualifies as an Industrial Company if it is an Israeli resident company that was incorporated in Israel and at least 90% of its income in any tax year (other than income from certain government loans) is generated from an “Industrial Enterprise” that it owns and located in Israel. An “Industrial Enterprise” is defined as an enterprise whose major activity, in a given tax year, is industrial production.

An Industrial Company is entitled to certain tax benefits, including:

- Deduction of the cost of the purchases of patents, or the right to use a patent or know-how used for the development or promotion of the Industrial Company;
- The right to elect, under certain conditions, to file a consolidated tax return together with Israeli Industrial Companies controlled by it; and
- Accelerated depreciation rates on equipment and buildings.

Eligibility for benefits under the Industry Encouragement Law is not subject to receipt of prior approval from any governmental authority.

We believe that certain of our Israeli subsidiaries currently qualify as Industrial Companies within the definition under the Industry Encouragement Law. We cannot assure you that we will continue to qualify as Industrial Companies or that the benefits described above will be available in the future.

Tax Benefits under the Law for the Encouragement of Capital Investments, 5719-1959

The Law for the Encouragement of Capital Investments, 5719-1959 (the “Investment Law”), provides certain incentives for capital investments in a production facility (or other eligible assets) by “Industrial Enterprises” (as defined under the Investment Law). Generally, an investment program that is implemented in accordance with the provisions of the Investment Law, referred to as an Approved Enterprise, a Beneficiary Enterprise or a Preferred Enterprise, is entitled to benefits as discussed below. These benefits may include cash grants from the Israeli government and tax benefits, based upon, among other things, the geographic location in Israel of the facility in which the investment is made or the election of the grantee. In order to qualify for these incentives, an Approved Enterprise, a Beneficiary Enterprise or a Preferred Enterprise is required to comply with the requirements of the Investment Law.

The Investment Law has been amended several times over the last years, with the three most significant changes effective as of April 1, 2005 (referred to as the “2005 Amendment”), as of January 1, 2011 (the “2011 Amendment”) and as of January 1, 2017 (the “2017 Amendment”). Pursuant to the 2005 Amendment, tax benefits granted in accordance with the provisions of the Investment Law prior to its revision by the 2005 Amendment remain in force but any benefits granted subsequently are subject to the provisions of the 2005 Amendment. Similarly, the 2011 Amendment introduced new benefits instead of the benefits granted in accordance with the provisions of the Investment Law in effect prior to the 2011 Amendment. However, companies entitled to benefits under the Investment Law as in effect prior to January 1, 2011 were entitled to choose to continue to enjoy such benefits, provided that certain conditions are met, or elect instead irrevocably to forego such benefits and elect the benefits of the 2011 Amendment. The 2017 Amendment introduces new benefits for Technological Enterprises, alongside the existing tax benefits.

Tax Benefits for Income from Approved Enterprises Approved Before April 1, 2005

Under the Investment Law prior to the 2005 Amendment, a company that wished to receive benefits on its investment program that is implemented in accordance with the provisions of the Investment Law (referred to as an Approved Enterprise), had to receive an approval from the Israeli Authority for Investments and Development of the Industry and Economy (referred to as the Investment Center) which we refer to as the Investment Center. Each certificate of approval for an Approved Enterprise relates to a specific investment program delineated by the financial scope of the investment, including sources of funds, and by the physical characteristics of the facility or other assets. The tax benefits available under any certificate of approval relate only to taxable income attributable to the specific program and are contingent upon meeting the criteria set out in the certificate of approval.

An Approved Enterprise may elect to forego any entitlement to the cash grants otherwise available under the Investment Law and, instead, participate in an alternative benefits program. Under the alternative benefits program, a company’s undistributed income derived from an Approved Enterprise will be exempt from corporate tax for a period of between 2 and 10 years from the first year of taxable income, depending on the geographic location within Israel of the Approved Enterprise, and a reduced corporate tax rate of between 10% to 25% for the remainder of the benefits period, depending on the level of foreign investment in the company in each year, as detailed below. The benefits period under Approved Enterprise status is limited to 12 years from the year in which the production commenced (as determined by the Investment Center), or 14 years from the year of receipt of the approval as an Approved Enterprise, whichever ends earlier. If a company has more than one Approved Enterprise program or if only a portion of its capital investments are approved, its effective tax rate is the result of a weighted combination of the applicable rates. The tax benefits available under any certificate of approval relate only to taxable income attributable to the specific program and are contingent upon meeting the criteria set out in the certificate of approval. Income derived from activity that is not integral to the activity of the Approved Enterprise will not enjoy tax benefits. The entitlement to the above benefits is subject to fulfillment of certain conditions, according to the law and related regulations.

A company that has an Approved Enterprise program is eligible for further tax benefits, if it qualifies as a Foreign Investors' Company, or FIC. An FIC eligible for benefits is essentially a company with a level of foreign investment, as defined in the Investment Law, of more than 25%. The level of foreign investment is measured as the percentage of rights in the company (in terms of shares, rights to profits, voting and appointment of directors), and of combined share and loan capital, that are owned, directly or indirectly, by persons who are not residents of Israel. The determination as to whether or not a company qualifies as an FIC is made on an annual basis. An FIC that has an Approved Enterprise program will be eligible for an extension of the period during which it is entitled to tax benefits under its Approved Enterprise status (so that the benefits period may be up to ten years) and for further tax benefits if the level of foreign investment is 49% or more. If a company that has an Approved Enterprise program is a wholly owned subsidiary of another company, then the percentage of foreign investment is determined based on the percentage of foreign investment in the parent company.

The corporate tax rates and related levels of foreign investments with respect to an FIC that has an Approved Enterprise program are set forth in the following table:

Percentage of non-Israeli ownership	**Corporate Tax Rate**
Over 25% but less than 49%	25%
49% or more but less than 74%	20%
74% or more but less than 90%	15%
90% or more	10%

A company that has elected to participate in the alternative benefits program and that subsequently pays a dividend out of the income derived from the portion of its facilities that have been granted Approved Enterprise status during the tax exemption period will be subject to corporate tax in respect of the amount of dividend distributed (grossed up to reflect such pre-tax income that it would have had to earn in order to distribute the dividend) at the corporate tax rate that would have been otherwise applicable if such income had not been tax-exempted under the alternative benefits program. This rate generally ranges from 10% to 25%, depending on the level of foreign investment in the company in each year, as explained above.

In addition, dividends paid out of income attributed to an Approved Enterprise (or out of dividends received from a company whose income is attributed to an Approved Enterprise) are generally subject to withholding tax at the rate of 15%, or at a lower rate as may be provided under an applicable tax treaty (subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for a reduced tax rate). The 15% tax rate is limited to dividends and distributions out of income derived during the benefits period and actually paid at any time up to 12 years thereafter. After this period, the withholding tax is applied at a rate of up to 30%, or at a lower rate under an applicable tax treaty (subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for a reduced tax rate). In the case of an FIC, the 12-year limitation on reduced withholding tax on dividends does not apply.

The Investment Law also provides that an Approved Enterprise is entitled to accelerated depreciation on its property and equipment that are included in an Approved Enterprise program. This benefit is an incentive granted by the Israeli government regardless of whether the alternative benefits program is elected.

The benefits available to an Approved Enterprise are subject to the fulfillment of conditions stipulated in the Investment Law and its regulations and the criteria in the specific certificate of approval with respect thereto, as described above. If a company does not meet these conditions, it would be required to refund the amount of tax benefits, adjusted to the Israeli consumer price index and interest or other monetary penalty.

In our case, subject to compliance with applicable requirements stipulated in the Investment Law and its regulations and in the specific certificate of approval, as described above, the portion of undistributed income derived from Approved Enterprise programs of one of Sapiens Israeli subsidiaries was exempt from corporate tax for a period of two years commencing in 2014, *Tax benefits under the 2005 Amendment that became effective on April 1, 2005.*

The 2005 Amendment applies to new investment programs commencing after 2004, and does not apply to investment programs approved prior to April 1, 2005. The 2005 Amendment provides that terms and benefits included in any certificate of approval that was granted before the 2005 Amendment became effective (April 1, 2005) will remain subject to the provisions of the Investment Law as in effect on the date of such approval. Pursuant to the 2005 Amendment, the Investment Center will continue to grant Approved Enterprise status to qualifying investments. The 2005 Amendment, however, limits the scope of enterprises that may be approved by the Investment Center by setting criteria for the approval of a facility as an Approved Enterprise.

An enterprise that qualifies under the new provisions is referred to as a Beneficiary Enterprise, rather than Approved Enterprise. The 2005 Amendment provides that a certificate of approval from the Investment Center is required only for Approved Enterprises that receive cash grants. As a result, a company is no longer required to obtain the advance approval of the Investment Center in order to receive the tax benefits previously available under the alternative benefits program. Rather, a company may claim the tax benefits offered by the Investment Law directly in its tax returns, provided that its facilities meet the criteria for tax benefits set forth in the 2005 Amendment. A company that has a Beneficiary Enterprise may, at its discretion, approach the Israel Tax Authority for a pre-ruling confirming that it is in compliance with the provisions of the Investment Law.

Tax benefits are available under the 2005 Amendment to production facilities (or other eligible facilities), which are generally required to derive more than 25% of their business income from export to specific markets with a population of at least 14 million in 2012 (such export criteria will further increase in the future by 1.4% per annum). In order to receive the tax benefits, the 2005 Amendment states that a company must make an investment which meets certain conditions set forth in the amendment for tax benefits and which exceeds a minimum investment amount specified in the Investment Law. Such investment entitles a company to receive a Beneficiary Enterprise status with respect to the investment, and may be made over a period of no more than three years from the end of the year in which the company chose to have the tax benefits apply to its Beneficiary Enterprise. Where a company requests to have the tax benefits apply to an expansion of existing facilities, only the expansion will be considered to be a Beneficiary Enterprise, and the company’s effective tax rate will be the weighted average of the applicable rates. In such case, the minimum investment required in order to qualify as a Beneficiary Enterprise must exceed a certain percentage of the value of the company’s production assets before the expansion.

The extent of the tax benefits available under the 2005 Amendment to qualifying income of a Beneficiary Enterprise depends on, among other things, the geographic location in Israel of the Beneficiary Enterprise. The location will also determine the period for which tax benefits are available. Such tax benefits include an exemption from corporate tax on undistributed income generated by the Beneficiary Enterprise for a period of between two to ten years, depending on the geographic location of the Beneficiary Enterprise in Israel, and a reduced corporate tax rate of between 10% to 25% for the remainder of the benefits period, depending on the level of foreign investment in the company in each year, as explained above. The benefits period is limited to 12 or 14 years from the year the company first chose to have the tax benefits apply, depending on the location of the company

Dividends paid out of income attributed to a Beneficiary Enterprise (or out of dividends received from a company whose income is attributed to a Beneficiary Enterprise) are generally subject to withholding tax at source at the rate of 15% or such lower rate as may be provided in an applicable tax treaty (subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for a reduced tax rate). The reduced rate of 15% is limited to dividends and distributions out of income attributed to a Beneficiary Enterprise during the benefits period and actually paid at any time up to 12 years thereafter, except with respect to an FIC, in which case the 12-year limit does not apply. Furthermore, a company qualifying for tax benefits under the 2005 Amendment which pays a dividend out of income attributed to its Beneficiary Enterprise during the tax exemption period will be subject to corporate tax in respect of the amount of the dividend distributed (grossed-up to reflect the pre-tax income that it would have had to earn in order to distribute the dividend) at the corporate tax rate that would have otherwise been applicable.

The benefits available to a Beneficiary Enterprise are subject to the continued fulfillment of conditions stipulated in the Investment Law and its regulations. If a company does not meet these conditions, it would be required to refund the amount of tax benefits, as adjusted by the Israeli consumer price index and interest, or other monetary penalty.

Income that is attributable to one of Sapiens' Israeli subsidiaries, was exempt from income tax for a period of two years commencing 2014 and ending 2015, under the 2005 Amendment.

Tax benefits under the 2011 Amendment that became effective on January 1, 2011.

The 2011 Amendment canceled the availability of the benefits granted to companies in accordance with the provisions of the Investment Law prior to 2011 and, instead, introduced new benefits for income generated by a "Preferred Company" through its Preferred Enterprise (as such terms are defined in the Investment Law) as of January 1, 2011. A Preferred Company is defined as either (i) a company incorporated in Israel which is not wholly owned by a governmental entity or (ii) a limited partnership that (a) was registered under the Israeli Partnerships Ordinance and (b) all of its limited partners are companies incorporated in Israel, but not all of them are governmental entities; which has, among other things, Preferred Enterprise status and is controlled and managed from Israel. Pursuant to the 2011 Amendment, a Preferred Company was entitled to a reduced corporate tax rate of 15% with respect to its preferred income attributed to its Preferred Enterprise in 2011 and 2012, unless the Preferred Enterprise was located in a certain development zone, in which case the rate was 10%. Such corporate tax rates were reduced to 12.5% and 7%, respectively, in 2013 and were increased to 16% and 9%, respectively, in 2014 until 2016. Pursuant to the 2017 Amendment, in 2017 and thereafter, the corporate tax rate for a Preferred Enterprise that is located in a specified development zone was decreased to 7.5%, while the reduced corporate tax rate for other development zones remains 16%. Income derived by a Preferred Company from a 'Special Preferred Enterprise' (as such term is defined in the Investment Law) would be entitled, during a benefits period of 10 years, to further reduced tax rates of 8%, or 5% if the Special Preferred Enterprise is located in a certain development zone. As of January 1, 2017, the definition for 'Special Preferred Enterprise' includes less stringent conditions.

Dividends paid out of preferred income attributed to a Preferred Enterprise or to a Special Preferred Enterprise are generally subject to withholding tax at source at the rate of 20% or such lower rate as may be provided in an applicable tax treaty (subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for a reduced tax rate). However, if such dividends are paid to an Israeli company, no tax is required to be withheld (although, if such dividends are subsequently distributed to individuals or a non-Israeli company, withholding tax at a rate of 20% or such lower rate as may be provided in an applicable tax treaty will apply). In 2017 to 2019, dividends paid out of preferred income attributed to a Special Preferred Enterprise, directly to a foreign parent company, are subject to withholding tax at source at the rate of 5% (temporary provisions).

The 2011 Amendment also provided transitional provisions to address companies already enjoying existing tax benefits under the Investment Law. These transitional provisions provide, among other things, that unless an irrevocable request is made to apply the provisions of the Investment Law as amended in 2011 with respect to income to be derived as of January 1, 2011: (i) the terms and benefits included in any certificate of approval that was granted to an Approved Enterprise, which chose to receive grants, before the 2011 Amendment became effective, will remain subject to the provisions of the Investment Law as in effect on the date of such approval, and subject to certain conditions; (ii) the terms and benefits included in any certificate of approval that was granted to an Approved Enterprise, that had participated in an alternative benefits program, before the 2011 Amendment became effective, will remain subject to the provisions of the Investment Law as in effect on the date of such approval, provided that certain conditions are met ; and (iii) a Beneficiary Enterprise can elect to continue to benefit from the benefits provided to it before the 2011 Amendment came into effect, provided that certain conditions are met. As of December 31, 2014 and 2015, some of our Israeli subsidiaries had filed a request to apply the new benefits under the 2011 Amendment.

New Tax benefits under the 2017 Amendment that became effective on January 1, 2017

The 2017 Amendment was enacted as part of the Economic Efficiency Law that was published on December 29, 2016, and is effective as of January 1, 2017, subject to the publication of regulations that were expected to be released before March 31, 2017. The 2017 Amendment provides new tax benefits for two types of "Technology Enterprises", as described below, and is in addition to the other existing tax beneficial programs under the Investment Law.

The 2017 Amendment provides that a technology company satisfying certain conditions will qualify as a “Preferred Technology Enterprise” and will thereby enjoy a reduced corporate tax rate of 12% on income that qualifies as “Preferred Technology Income”, as defined in the Investment Law. The tax rate is further reduced to 7.5% for a Preferred Technology Enterprise located in development zone A. In addition, a Preferred Technology Company will enjoy a reduced corporate tax rate of 12% on capital gain derived from the sale of certain “Benefited Intangible Assets” (as defined in the Investment Law) to a related foreign company if the Benefited Intangible Assets were acquired from a foreign company on or after January 1, 2017 for at least NIS 200 million, and the sale receives prior approval from the National Authority for Technological Innovation (referred to as NATI).

The 2017 Amendment further provides that a technology company satisfying certain conditions will qualify as a “Special Preferred Technology Enterprise” and will thereby benefit from a reduced corporate tax rate of 6% on “Preferred Technology Income” regardless of the company’s geographic location within Israel. In addition, a Special Preferred Technology Enterprise will benefit from a reduced corporate tax rate of 6% on capital gain derived from the sale of certain “Benefited Intangible Assets” to a related foreign company if the Benefited Intangible Assets were either developed by an Israeli company or acquired from a foreign company on or after January 1, 2017, and the sale received prior approval from NATI. A Special Preferred Technology Enterprise that acquires Benefited Intangible Assets from a foreign company for more than NIS 500 million will be eligible for these benefits for at least ten years, subject to certain approvals as specified in the Investment Law.

Dividends distributed by a Preferred Technology Enterprise or a Special Preferred Technology Enterprise, paid out of Preferred Technology Income, are subject to withholding tax at source at the rate of 20%, and if distributed to a foreign company and other conditions are met, the withholding tax rate will be 4%.

We are examining the impact of the 2017 Amendment and the degree to which our Israeli investees will qualify as a Preferred Technology Enterprise or Special Preferred Technology Enterprise, and the amount of Preferred Technology Income that our investees may have, or other benefits that our investees may receive, from the 2017 Amendment.

Tax Benefits for Research and Development

Israeli tax law allows, under certain conditions, a tax deduction for research and development expenditures, including capital expenditures, for the year in which they are incurred. Such expenditures must relate to scientific research and development projects, and must be approved by the relevant Israeli government ministry, determined by the field of research. Furthermore, the research and development must be for the promotion of the company’s business and carried out by or on behalf of the company seeking such tax deduction. However, the amount of such deductible expenses is reduced by the sum of any funds received through government grants for the finance of such scientific research and development projects. Expenditures not so approved by the relevant Israeli government ministry, but otherwise qualifying for deduction, are deductible over a three-year period

B. Liquidity and Capital Resources

Since inception, we have financed our growth and business primarily through cash provided by operations and through public debt and equity offerings, as well as through private and public debt and equity offerings of our subsidiaries. In addition, we finance our business operations through short-term and long-term loans and borrowings available under our credit facilities.

Current Outlook

We had cash and cash equivalents and short-term investments of $283.4 million and $275.7 million at December 31, 2015 and December 31, 2016, respectively. At December 31, 2015 and December 31, 2016, we had indebtedness to banks and others of $ 220.1 million and $ 259.0 million, respectively, of which $ 59.3 million and $88.0 million were current liabilities and $ 160.8 million and $ 171.0 million were long-term liabilities as of those respective dates. In addition, as of December 31, 2016, we had indebtedness of $58.7 million outstanding under our secured debentures and convertible debentures which we sold in a public offering in Israel in September 2015, as described below.

In January 2014, Formula received a NIS 200 million loan (approximately $57.6 million) from a leading Israeli institutional investor. The loan is secured by certain of the shares of each of our publicly held subsidiary and affiliated companies. The loan's average duration from inception is approximately four years (paid over a period of 6 years, with the first payment made in January 2016) and carries a fixed annual interest rate of 5.5%.

Under the terms of the loan with the Israeli institutional investor, Formula has undertaken to maintain the following financial covenants, as they will be expressed in its financial statements, as described:

1. Formula’s equity shall not be lower than $ 160 million at all times.
2. The ratio of Formula’s equity to total assets will not be less than 20%.
3. The ratio of Formula’s total financial debts less cash, short-term deposits and short-term marketable securities to the annual EBITDA will not exceed 3.5 to 1.
4. The ratio of Formula’s total financial debts less cash, short-term deposits and short-term marketable securities to the total assets will not exceed 30%.
5. Formula’s liabilities to banks and other financial institutions in its standalone balance sheet shall not be higher than NIS 450 million (approximately $ 115.7 million).
6. Formula will not create any pledge on all or part of its property and assets in favor of any third party and will not provide any guarantee to secure any third party's debts as they are today and as they will be without the financial institution's consent.
7. Formula will not sell and/or transfer all or part of its assets to others in any manner whatsoever without the financial institution’s advance written consent, unless it is done in the ordinary course of business.

In September 2015, Formula consummated a public offering of debentures in Israel. The two series of debentures issued by Formula in the public offering consisted of one series of debentures (the “Series A Secured Debentures”) that are secured by liens on the shares of Formula’s subsidiaries and affiliate held by Formula, while the second series (the “Series B Convertible Debentures,” and, together with the Secured Debentures, the “Debentures”) are convertible into ordinary shares of Formula. The Debentures are listed for trading only on the TASE.

In the public offering, Formula issued and sold a total amount of NIS 227,260,000 ($ 57.8 million) par value of the New Debentures, which were subdivided into the following respective amounts of Secured Debentures and Convertible Debentures that are subject to the following terms:

- NIS 102,260,000 ($ 26.1 million) par value of Series A Secured Debentures, bearing interest on the unpaid principal at a fixed annual rate equal to 2.8% (which may vary based on the credit rating of the debentures), paid on a semi-annual basis through July 2024. The principal is payable in eight equal annual installments beginning in July 2017 and ending in July 2024. The interest rate varies based on the credit rating of the Secured Debentures. The net proceeds received by Formula from the issuance of Series A Secured Debentures amount to $ 25.9 million (net of issuance expenses).

- NIS 125,000,000 ($ 31.2 million) par value of Series B Convertible Debentures, at a price per debenture unit (each unit comprised of NIS 1,000 par value of debentures) of NIS 1,020. The Series B Convertible Debentures bear interest at a fixed annual rate equal to 2.74% (which may vary based on the credit rating of the debentures), payable in one payment upon maturity of the Series B Convertible Debentures on March 26, 2019 (at which time the accrued interest will constitute 10% of the principal amount of the Convertible Debentures, in the aggregate). The Series B Convertible Debentures are subject to conversion into the Company’s ordinary shares at a rate of NIS 157 ($ 40.03) par value of Convertible Debentures per one share. The conversion rate is subject to adjustment for the issuance of bonus shares, rights and dividends. The principal amount of and interest on the Series B Convertible Debentures is subject to adjustment based on changes in the exchange rate between the NIS and the U.S. dollar relative to the exchange rate on September 8, 2015. The net proceeds received by Formula from the issuance of Series B Convertible Debentures amount to $ 32.1 million (net of issuance expenses).

The gross proceeds received by Formula from the issuance of all New Debentures were approximately NIS 229.8 million ($ 58.6 million), in the aggregate.

The Series A and B debentures contain, in addition to standard terms and obligations, the following obligations:

- a negative pledge, subject to certain exceptions;
- a covenant not to distribute dividends unless (i) shareholders equity (not including minority interests) shall not be less than $250 million, (ii) Formula’s net financial indebtedness (financial indebtedness net of cash, marketable securities, deposits and other liquid financial instruments) shall not exceed 65% of net CAP (which is defined financial indebtedness, net, plus shareholders equity), (iii) the amount of the distributions shall be equal to profits for the years ended December 31, 2014 and 2015 and 75% of profits accrued from January 1, 2016 until the distribution and (iv) no event of default shall have occurred.; and
- Financial covenants, including (i) the equity attributable to the shareholders of Formula, as reported in Formula’s annual or quarterly financial statements, will not be less than $160 million, (ii) Formula’s net financial indebtedness (financial indebtedness net of cash, marketable securities, deposits and other liquid financial instruments) shall not exceed 65% of net CAP (which is defined as financial indebtedness, net, plus shareholders equity) and (iii) at all times, Formula’s cash balance will not be less than the annual interest payment (compounded) for the unpaid principal amount of the Series B debentures.

We also agreed to standard events of default, together with the following:

- cross default, excluding following an immediate repayment initiated in relation to the other series of debentures or other indebtedness (other than non-recourse debt) over NIS 75 million ($19.2 million);
- suspension of trading of the debentures on the TASE over a period of 60 days;
- failure to have the debentures rated over a period of 60 days;
- If the rating of the debentures is less than BBB- by Standard and Poors Maalot or equivalent rating of other rating agencies;
- If there is a change in control without consent of the rating agency;
- If Formula fails to provide additional security when the loan-to-value of the securities securing the Series A debentures falls below the required ratio;
- the existence of a real concern that Formula will not meet its material undertakings towards the debenture holders;
- the inclusion in Formula’s financial statements of a note regarding the existence of significant doubt as to Formula’s ability to continue as a going concern;
- breach of Formula’s undertakings regarding the issuance of additional debentures;
- Formula’s failure to continue to control any of its subsidiaries; and
- failure to comply with the negative pledge covenant.

From time to time, our subsidiaries and affiliated companies also maintain credit facilities with banks and issue debt instruments such as debentures in accordance with their cash requirements. These credit facilities and debentures include, inter alia, certain covenants related to our subsidiaries’ operations, such as the required maintenance of a minimum level of shareholders’ equity and the achievement of certain operating results targets. Some of our subsidiaries’ assets are pledged to the lender banks and debenture holders. If any of our subsidiaries does not meet the covenants specified in its credit agreement or indenture (or equivalent agreement with the debenture holders), and a waiver with respect to the fulfillment of such covenant has not been received from the lender bank or representative of the debenture holders, the lender bank or debenture holders (via the action of their representative) may foreclose on the pledged assets to satisfy a debt.

Currently, Matrix, Sapiens, Magic Software and Formula have such material credit facilities outstanding. The long-term debt obligations of Matrix bear fixed interest at an average annual rate of 2.60%-5.85%. The long-term debt obligations of Magic Software bear fixed interest at an annual rate of 2.60%. These credit facilities expire over a period of time that ranges from 1 to 7 years.

As of December 31, 2016, Matrix had aggregate short-term obligations to banks and others of NIS 256.1 million (approximately $ 66.6 million) and aggregate long-term obligations to banks of NIS 208.0 million (approximately $ 54.1 million) under its credit facilities. As of December 31, 2016, Magic Software had aggregate short-tem obligations to banks and others of $ 5.6 million and aggregate long-term obligations to banks and others of $ 27.3 million) under its credit facilities.

In November 2016, Magic Software obtained a NIS 120 million (approximately $31.4 million) loan linked to the New Israel shekel from an Israeli institution. Magic Software intend to use the proceeds from this loan for its general corporate purposes, which may include the funding of its working capital needs and the funding of potential acquisitions. The principal amount of the loan is payable in seven equal annual payments with the final payment due on November 2, 2023 and bears a fixed interest rate of 2.60% per annum, payable in two semi-annually payments. The loan, which may be prepaid under certain circumstances, is subject to various financial covenants which mainly consist of the following:

1. Magic Software equity will not be lower than $ 100 million (one hundred million U.S. Dollars) at all times.
2. Magic Software cash and cash equivalent and marketable securities available for sales will not be less than $10 million (ten million U.S. Dollars).
3. The ratio of Magic Software total financial debts to total assets will not exceed 50%.
4. The ratio of Magic Software total financial debts less cash, short-term deposits and short-term marketable securities to the annual EBITDA will not exceed 3.25 to 1.
5. Magic Software will not create any pledge on all of its property and assets in favor of any third party without the financial institution’s consent

In the first quarter of 2017, Sapiens (via its wholly-owned subsidiary, Sapiens Americas Corporation, or the Borrower) entered into a secured credit agreement, or the Credit Agreement, with HSBC Bank USA, National Association, or the Lender, in connection with, and as financing for, Sapiens’ acquisition of StoneRiver. Pursuant to the Credit Agreement, Sapiens borrowed $ 40 million, or the Bank Loan, for a five-year term. The Bank Loan will mature in March 2022 and is payable in equal consecutive quarterly principal installments of principal and accrued interest. The Borrower is entitled to prepay the Bank Loan at any time (on any interest payment date) without penalty upon notice to the Lender. The Bank Loan bears interest at the rate of LIBOR plus 1.85%.

The repayment of the Bank Loan is secured by a first priority liens over (i) substantially all assets of the Borrower and its US subsidiaries and (ii) the shares of the Borrower held by Sapiens International Corporation B.V. Certain affiliated entities of the Borrower have guaranteed the repayment of the Bank Loan. The Credit Agreement contains customary representations and warranties, affirmative covenants and negative covenants, which include, without limitation, restrictions on indebtedness, liens, investments, and certain dispositions with respect to the property secured by the lien. The Credit Agreement also contains customary events of default that entitle the Lender to cause any or all of our company's indebtedness to become immediately due and payable and to foreclose on the lien, and includes customary grace periods before certain events are deemed events of default.

We believe that our current cash reserves, together with cash that may be distributed to us from the ongoing operations of our subsidiaries and any credit that we may choose to draw upon that is available under our (and our subsidiaries’ and affiliated company’s) existing credit facilities should be sufficient for our present working capital requirements for at least the next 12 months at our current level of operations. We will consider in the future additional equity issuances, debt issuances or borrowings from banks if necessary to meet cash needs for our growth, including if needed to consummate one or more acquisitions for consideration consisting of all or a substantial portion of our available cash. Should we require additional financing in the future, we cannot assure you that such financing will be available on favorable terms or at all.

As of the date of the financial statements, Formula, Magic Software and Matrix were in compliance with the above financial covenants.

Cash Provided by Operating Activities

Cash flow provided by our operating activities decreased from $87.1 million in 2015 to $75.0 million in 2016.

Net cash provided by operating activities in 2016 consisted primarily of the cash generated by our subsidiaries' ongoing operating activities and of net income stemming therefrom, as adjusted for non-cash activity, including changes in operating assets and liabilities. The material upwards adjustments in cash flow reflecting non-cash activity included adjustments due to (i) depreciation and amortization of capitalized research and development assets, other intangible assets (mainly customer relations) and property, plants and equipment, in an aggregate amount of $ 32.4 million, (ii) stock-based compensation expenses, in an amount of $ 4.4 million, (iii) an increase in trade payables and in other accounts payable and employees and payroll accrual, in an aggregate amount of $ 14.1 million, (iv) an increase in redeemable non-controlling interests' put option and in liabilities in respect of business combinations, in an aggregate amount of $ 3.8 million, and (v) decrease in inventory of $ 0.9 million, (vi) change in value of debentures of $ 1.4 million and (vii) changes in value of short-term and long term loans from banks and others and deposits in an amount of $ 0.5 million. Material downwards adjustments in cash flow for non-cash activity, including changes in operating assets and liabilities, consisted of adjustments of (i) an increase in trade receivables in an amount of $30.1 million, (ii) a decrease in deferred revenues, in an amount of $ 2.7 million, (iii) gain from sale of property, plants and equipment in an amount of $ 3.1 million, (iv) decrease in employee benefit liabilities in an amount of $ 1.7 million and (v) Increase in other current and long-term accounts receivable of $ 0.5 million.

Cash flow provided by operating activities in 2016 was primarily comprised of $29.8 million provided by Matrix, $26.0 million provided by Sapiens, and $28.0 million provided by Magic, offset by $5.4 million used by Formula and approximately $ 3.4 million used by Insync.

Net cash provided by operations in 2015 consisted primarily of the cash generated by our subsidiaries' ongoing operating activities and of net income stemming therefrom, as adjusted for non-cash activity, including changes in operating assets and liabilities. The material upwards adjustments in cash flow reflecting non-cash activity included adjustments due to (i) depreciation and amortization of capitalized research and development assets and other intangible assets (mainly customer relations) and property, plants and equipment, in an aggregate amount of $ 30.9 million, (ii) stock-based compensation expenses, in an amount of $4.9 million, (iii) increase in other accounts payable and employees and payroll accrual and deferred revenues, in an aggregate amount of $12.5 million, (iv) increase in trade payables in an amount of $10.0 million, (v) change in deferred taxes, net in an amount of $ 2.1 million, and (vi) change in redeemable non-controlling interests' put option and in liabilities in respect of business combinations, in an aggregate amount of $ 1.6 million. Material downwards adjustments in cash flow for non-cash activity, including changes in operating assets and liabilities, consisted of adjustments of (i) an increase in trade receivables in an amount of $17.7 million, (ii) an increase in inventory, in an amount of $2.4 million, reflecting our subsidiaries' strategy to maintain adequate, but not excessive, levels of inventory based on their anticipation of future demand for proprietary software products and software services, (iii) increase in other current and long term account receivables in an amount of $4.2 million, (iv) decrease in employee benefit liabilities in an amount of $0.5 million and (v) Realized gain from sale of available for sale securities of $ 0.3 million.

Cash flow provided by operating activities in 2015 was primarily comprised of $25.9 million provided by Matrix, $40.4 million provided by Sapiens, $19.6 million provided by Magic.

Cash provided by (used in) Financing Activities

Cash used in financing activities of $7.0 million in 2016 compared to cash provided by financing activities of $ 20.6 million in 2015, mainly reflecting the cumulative effect of the following financing-related transactions that occurred over the course of those years:

Year Ended December 31, 2016

In June 2016, Formula declared a cash dividend to its shareholders, to be paid in July 2016, of $0.34 per share. The aggregate amount distributed by Formula was approximately $5.0 million.

In January 2016, Formula declared a cash dividend to its shareholders, to be paid in February 2016, of $0.34 per share. The aggregate amount distributed by Formula was approximately $5.0 million.

In March 2016, Matrix distributed to its shareholders a cash dividend in an aggregate amount of approximately $ 6.4 million, of which $ 3.2 million was paid to non-controlling interests in Matrix.

In June 2016, Matrix distributed to its shareholders a cash dividend in an aggregate amount of approximately $ 6.0 million, of which $ 3.0 million was paid to non-controlling interests in Matrix.

In September 2016, Matrix distributed to its shareholders a cash dividend in an aggregate amount of approximately $ 7.8 million, of which $ 3.9 million was paid to non-controlling interests in Matrix.

In December 2016, Matrix distributed to its shareholders a cash dividend in an aggregate amount of approximately $ 5.9 million, of which $ 3.0 million was paid to non-controlling interests in Matrix.

In June 2016, Sapiens distributed to its shareholders a cash dividend in the aggregate amount of $0.20 per common shares. The aggregate amount distributed by Sapiens was approximately $ 10.0 million.

In February 2016, Magic Software declared a cash dividend in the amount of $0.09 per share that was paid on March 17, 2016. The aggregate amount distributed by Magic Software was approximately $4.0 million.

In August 2016, Magic Software declared a cash dividend in the amount of $0.085 per share that was paid on September 22, 2016. The aggregate amount distributed by Magic Software was approximately $3.8 million.

In addition, net cash used in financing activities in 2016 was attributable to (i) repayment of long term loans from banks and others in an amount of $ 37.4 million, (ii) purchase of non-controlling interests and redeemable non-controlling interests in an amount of $ 3.2 million (iii) cash paid in conjunction with acquisition of activities in an amount of $1.2 million and (iv) distribution of $ 1.4 million to our ultimate parent company for a business acquisition under common control (that is, for the acquisition of Insseco, as described in Item 3.A, “Selected Financial Data” above), offset by (i) receipt of long term loans in an amount of $ 49.6 million (ii) exercise of employees stock options in subsidiaries in an amount of $ 0.9 million and (iii) an increase in short-term bank credit, net in an amount of $ 20.7 million.

Year Ended December 31, 2015

In February 2015, Formula paid to its shareholders a cash dividend in an aggregate amount of approximately $ 7.9 million, which was announced in December 2014.

In August 2015, Formula paid to its shareholders a cash dividend in an aggregate amount of approximately $ 5.0 million, which was announced in June 2015.

In March 2015, Matrix distributed to its shareholders a cash dividend in an aggregate amount of approximately $ 5.5 million, of which $ 2.7 million was paid to non-controlling interests in Matrix.

In June 2015, Matrix distributed to its shareholders a cash dividend in an aggregate amount of approximately $ 5.0 million, of which $ 2.5 million was paid to non-controlling interests in Matrix.

In September 2015, Matrix distributed to its shareholders a cash dividend in an aggregate amount of approximately $ 4.4 million, of which $ 2.2 million was paid to non-controlling interests in Matrix.

In December 2015, Matrix distributed to its shareholders a cash dividend in an aggregate amount of approximately $ 3.9 million, of which $ 2.0 million was paid to non-controlling interests in Matrix.

In April 2015, Sapiens distributed to its shareholders a cash dividend in an aggregate amount of approximately $ 7.2 million, of which $ 3.6 million was paid to non-controlling interests in Sapiens.

In addition, net cash provided by financing activities in 2015 was attributable to (i) our issuance of debentures in the

In addition, net cash provided by financing activities in 2015 was attributable to (i) our issuance of debentures in the amount of $ 58.6 million (ii) an increase in short term bank credit, net and proceeds from long term debt in the aggregate amount of $ 35.0 million and (iii) exercise of employees stock options in subsidiaries in an amount of $ 2.0 million, offset by (i) repayment of long term loans from banks and others in an amount of $ 26.9 million, (ii) distribution of $ 8.5 million to our ultimate parent company for a business acquisition under common control (that is, for the acquisition of Insseco, as described in Item 3.A, “Selected Financial Data” above), and (iii) cash paid in conjunction with acquisition of activities and Purchase of non-controlling interests in the aggregate amount of $ 6.7 million.

Cash Used in Investing Activities

Net cash used in our investing activities was $ 78.9 million in 2016 compared to $ 31.5 million in 2015. Net cash used in investing activities in 2016 was attributable to (i) expenditure (net of cash acquired) with respect to business acquisitions in an amount of $ 44.8 million, (ii) purchase of property and equipment in an amount of $ 9.1 million, (iii) Investment in and loans to affiliates and other companies $ 25.8 million, (iv) capitalization of software development and other cost in an amount of $9.8 million, (v) increase in restricted cash in other accounts receivable in an amount of $ 0.5 million and (vi) payments to former shareholders of consolidated companies in an amount of $ 1.8 million, offset by (i) proceeds from sale of marketable securities, net in an amount of $ 8.5 million and (ii) proceeds from sale of property, plants and equipment in an amount of $ 2.3 million and (iii) changes in short term deposits, net in an amount of $ 2.7 million.

Net cash used in our investing activities was $ 31.5 million in 2015. Net cash used in investing activities in 2015 was attributable to (i) expenditure (net of cash acquired) with respect to business acquisitions in an amount of $ 17.0 million, (ii) purchase of property and equipment in an amount of $ 6.8 million, (iii) proceeds from sale of marketable securities, net in an amount of $ 0.7 million, (iv) capitalization of software development and other cost in an amount of $9.9 million, and (vi) increase in restricted cash in other accounts receivable in an amount of $ 0.9 million, offset by (i) change in short term deposits in an amount of $ 3.9 million.

Company Commitments

In January 2014, Formula agreed to the terms of a NIS 200 million loan (approximately $57.6 million) that was extended to us by a leading Israeli institutional investor. The loan is secured by certain of the shares of each of our publicly held subsidiaries and affiliated company. The loan's average duration is approximately four years (paid over a period of 6 years) and carries a fixed annual interest rate of 5.5%. The terms of the loan are further described above.

In September 2015, Formula consummated a public offering in Israel of its Series A Secured Debentures and Series B Convertible Debentures, or together, the New Debentures. The Debentures are listed for trading only on the TASE.

In the public offering, Formula issued and sold a total amount of NIS 227,260,000 ($ 57.8 million) par value of the New Debentures, which were subdivided into the following respective amounts of Secured Debentures and Convertible Debentures that are subject to the following terms:

NIS 102,260,000 ($ 26.1 million) par value of Series A Secured Debentures, bearing interest on the unpaid principal at a fixed annual rate equal to 2.8% (which may vary based on the credit rating of the debentures), paid on a semi-annual basis through July 2024. The principal is payable in eight equal annual installments beginning in July 2017 and ending in July 2024. The interest rate varies based on the credit rating of the Secured Debentures. The net proceeds received by Formula from the issuance of Series A Secured Debentures amount to $ 25.9 million (net of issuance expenses).

NIS 125,000,000 ($ 31.2 million) par value of Convertible Debentures, at a price per debenture unit (each unit comprised of NIS 1,000 par value of debentures) of NIS 1,020. The Convertible Debentures bear interest at a fixed annual rate equal to 2.74% (which may vary based on the credit rating of the debentures), payable in one payment upon maturity of the Convertible Debentures on March 26, 2019 (at which time the accrued interest will constitute 10% of the principal amount of the Convertible Debentures, in the aggregate). The Convertible Debentures are subject to conversion into the Company’s ordinary shares at a rate of NIS 157 ($ 40.03) par value of Convertible Debentures per one share. The conversion rate is subject to adjustment for the issuance of bonus shares, rights and dividends. The principal amount of and interest on the Convertible Debentures is subject to adjustment based on changes in the exchange rate between the NIS and the U.S. dollar relative to the exchange rate on September 8, 2015. The net proceeds received by Formula from the issuance of Series B convertible Debentures amount to $ 32.1 million (net of issuance expenses).

As noted above, the Series A and B debentures contain, in addition to standard terms and obligations, the following obligations:

- a negative pledge, subject to certain exceptions;
- a covenant not to distribute dividends unless (i) shareholders equity (not including minority interests) shall not be less than $250 million, (ii) Formula’s net financial indebtedness (financial indebtedness net of cash, marketable securities, deposits and other liquid financial instruments) shall not exceed 65% of net CAP (which is defined financial indebtedness, net, plus shareholders equity), (iii) the amount of the distributions shall be equal to profits for the years ended December 31, 2014 and 2015 and 7% of profits accrued from January 1, 2016 until the distribution and (iv) no event of default shall have occurred.; and
- Financial covenants, including (i) the equity attributable to the shareholders of Formula, as reported in Formula’s annual or quarterly financial statements, will not be less than $160 million, (ii) Formula’s net financial indebtedness (financial indebtedness net of cash, marketable securities, deposits and other liquid financial instruments) shall not exceed 65% of net CAP (which is defined as financial indebtedness, net, plus shareholders equity) and (iii) at all times, Formula’s cash balance will not be less than the annual interest payment (compounded) for the unpaid principal amount of the Series B debentures.

As of December 31, 2016, we were in full compliance with the financial covenants of our loan and Series A Secured Debentures and Series B Convertible Debentures.

We do not have material commitments for capital expenditures by Formula as of December 31, 2016 or as of the date of this annual report.

We have entered into an undertaking to indemnify our office holders in specified limited categories of events and in specified amounts, subject to certain limitations. For more information, see “Item 7. Major Shareholders and Related Party Transactions—Related Party Transactions—Indemnification of Office Holders.”

Subsidiary Commitments

Our subsidiaries do not have any material commitments for capital expenditures as of December 31, 2016 or as of the date of this annual report.

As alluded to above (see “—Current Outlook”), the loan agreements, debentures and indentures to which we are party contain a number of conditions and limitations on the way in which we (mainly Matrix and Formula can operate our businesses, including limitations on our ability to raise debt and sell or acquire assets not in normal business activity. For example, Matrix’s loan agreement includes a negative pledge with respect to Matrix’s assets, as well as limitations on Matrix’s ability to provide guarantees to third parties and sell or transfer its assets. Matrix’s loan agreements also contain various covenants which require it to maintain certain financial ratios related to shareholders’ equity and operating results that are customary for companies of comparable size.

Our subsidiaries and affiliate as of December 31, 2016 have provided bank guarantees aggregating to approximately $ 20.8 million as security for the performance of various contracts with customers. If our subsidiaries and affiliates were to breach certain terms of such contracts, the customers could demand that the banks providing the guarantees pay amounts claimed to be due.

Our subsidiaries and affiliate as of December 31, 2016 have also provided additional bank guarantees aggregating to $ 4.7 million as security for rent to be paid for their offices. If our subsidiary and affiliate were to breach certain terms of their leases, the lessors could demand that the banks providing the guarantees pay amounts claimed to be due.

Pursuant to the credit agreement and the Secured Debentures described above, liens have been incurred over a certain portion of our investment in outstanding shares of Matrix, Sapiens and Magic Software.

We and IAI granted TSG, our jointly controlled affiliate, in equal share, a guarantee of NIS 40 million (approximately $ 10.4 million) as security against TSG’s bank credit line and bank guarantees issued by TSG for the performance of various contracts with its customers.

C. Research and Development, Patents and Licenses, etc.

The net amounts that we spent on research and development activities in 2015 and 2016 were $ 15.1 million and $ 22.3 million, respectively. For more information about our research and development activities, see “Item 4. Information on the Company—Business Overview— Software Development.”

For information concerning our intellectual property rights, see “Item 4. Information on the Company— Business Overview—Intellectual Property Rights.”

D. Trend Information

For information see discussion in Item 4. “Information on the Company-Business Overview-Industry Background and Trends” and Item 5. “Operating and Financial Review and Prospects - Results of Operations.”

E. Off-Balance Sheet Arrangements

We are not a party to any off-balance sheet arrangements. In addition, we have no unconsolidated special purpose financing or partnership entities that are likely to create material contingent obligations.

F. Tabular Disclosure of Contractual Obligations

The following table summarizes our contractual obligations and commitments as of December 31, 2016.

	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 Years	More than 5 years
	(U.S. dollars, in thousands)				
Long-term debt obligations (1)	159,271	41,240	71,640	29,127	17,264
Lease obligations	62,732	26,206	26,013	10,513	
Liabilities in respect of the acquisitions of operations	46,335	9,795	35,412	1,128	
Debentures	58,467	3,324	38,519	6,648	9,976
Liability to the Innovation Authority (2)					
Uncertainties in income taxes (3)	3,770				
Accrued severance payments, net (4)	6,176				
Total	**336,751**	**80,565**	**171,584**	**47,416**	**27,240**

(1) Does not include interest.

(2) Does not include contingent liabilities to the Innovation Authority of approximately $7.1 million as described in Note 17(f) to our consolidated financial statements contained elsewhere in this annual report.

(3) Payment of uncertain tax benefits would result from settlements with taxation authorities. Due to the difficulty in determining the timing of settlements, this information is not included in the above table. We do not expect to make any significant payments for these uncertain tax positions within the next 12 months.

(4) Accrued severance payments, net relate to accrued severance obligations and notice obligations mainly to our Israeli employees as required under Israeli labor law or personal employment agreements. We are legally required to pay severance upon certain circumstances, primarily upon termination of employment by our company, retirement or death of the respective employee. Our liability for all of our Israeli employees is fully provided for by monthly deposits with insurance policies and by an accrual.