



The FORTNIGHTLY

A Review of Middle East Regional Economic & Cultural News & Developments

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Written & Edited by Seth J. Vogelmann*

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1. ISRAEL GOVERNMENT ACTIONS & STATEMENTS

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1.1. Bank of Israel Cuts Key Rate to 0.1% from 0.25%

On 6 April, the Bank of Israel lowered its benchmark interest rate to 0.1% from 0.25% – its first rate cut in five years, joining other central banks in helping the economy cope with the coronavirus outbreak. The bank's Monetary Committee's move reflects its anticipation of a global recession and reversed its decision to raise the rate from 0.1% to 0.25% in November 2018. The committee further decided on two additional steps: To put a new monetary instrument into operation, in order to provide loans to banks for a term of three years, and to bolster the banks' support of liquidity and the orderly functioning of the financial markets.

The Bank of Israel said that the coronavirus crisis has undercut growth, making the economy shift into contraction. With less than 30% of the economy active at this time, private consumption has dropped by 25% compared to the pre-crisis period, and over 1 million Israelis, 24% of the workforce, are now unemployed. The central bank last month projected an economic contraction in 2020 due to the partial lockdown stemming from the coronavirus pandemic, while Governor Yaron had signaled no rate reduction is planned for now. (Israel Hayom 07.04)

2. ISRAEL MARKET & BUSINESS NEWS

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2.1. Identiq Named in Gartner's "Cool Vendors in Privacy" Report

Identiq has been recognized in the Cool Vendors in Privacy, 2020 report by Gartner, Inc. The report states, "As privacy laws evolve globally, the vendor landscape has developed with innovative solutions that help security and risk management leaders respond to key requirements." Identiq has developed the first and only truly anonymous verification network, which enables companies to work together to validate identities without sharing or exposing any personal customer data. The network is built on the company's proprietary FAIR technology, which uses sophisticated and proven cryptographic algorithms to anonymously compare new user data against identities already trusted by other network members while preserving customer privacy.

Tel Aviv's [Identiq](#) is a peer-to-peer identity verification network that allows its members to validate new users and vouch for ones they trust without sharing any customer data or identifiable information whatsoever. This providerless solution takes third-party data providers out of the equation, instead leveraging the consensus of other network members and setting a new standard for end-user privacy. Identiq enables companies to accurately fight fraud and identify good users - reducing false positives, increasing approval rates and creating a better user experience. (Identiq 01.04)

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2.2. Alibaba Invests in Hotelmize

Alibaba, with a market capitalization of \$506 billion, is the largest e-commerce retailer in China. Alibaba noticed Hotelmize's innovation and success and led the Series B round of funding, adding to the \$5 million raised in previous rounds. Hotelmize looks forward to using the new capital to extend their data-driven solutions into new markets and help more travel companies protect their profit margins and stay resilient during these unprecedented times.

Hotelmize, nominated as one of the most promising startups of 2020 by Phocuswright, has developed a unique profit solution for travel businesses using AI algorithms based on the latest stock market trading technology. Hotelmize's revolutionary approach to profit optimization harnesses big data and machine learning in order to predict price movements. The software integrates with OTAs, tour operators, and wholesalers' booking systems to track the price fluctuations of hotel bookings and then automatically re-book at the optimal price point, unlocking profits of more than 30% for its clients. Last year, the technology

was applied to 280,000 bookings which resulted in a total saving of \$15 million for Hotelmize clients. To date, Hotelmize has handled over \$2 billion worth of reservations and generated more than \$100m of extra profit for its customers, who include some of the leaders of the global tourism industry.

Inspired by the algorithmic trading of capital markets, Tel Aviv's [Hotelmize](#)'s AI-based technology monitors hotel room price fluctuations from the time of reservation until the check-in date and trades the rooms in the same way that algorithms trade stocks in the capital markets. Hotelmize's algorithms utilize investment strategies similar to the financial market's short and long positions, buying and selling hotel rooms in a completely automated manner to generate additional profits that were never available for travel operators before. (Various 01.04)

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2.3. Air Doctor Raises \$7.8 Million

Motza Illit's [Air Doctor](#) has completed a \$7.8 million Series A financing round from AXA backed venture capital fund Kamet Ventures and The Phoenix Holdings. Founded in 2016, Air Doctor connects travelers who are sick abroad with local private physicians. The platform is available in 42 countries, and allows patients to tap into a network of doctors that fit their location, language, specialty and cost needs.

For the travel ecosystem including the insurance industry, credit card companies and mobile operators, Air Doctor offers a seamless digital solution that reduces claim and operational costs while increasing customer loyalty and satisfaction. To date, Air Doctor clients have seen a 30% increase in insurance revenue and a 14% reduction in claims related to doctors' visits. During the COVID-19 pandemic, Air Doctors' partners understand the enormous benefits the solution can offer them on their customers' journeys as well as on their claim costs. The service also reduces the burden on local hospitals by sending stranded workers and travelers with no medical emergency to private clinics.

This latest financing round follows Air Doctor's \$3.1 million seed round in 2018. The new funds will be used to bolster Air Doctor's medical network and R&D capabilities and for international expansion across the insurance, telecom and credit card industries. (Various 30.03)

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2.4. Bliss Receives \$1 Million Pre-Seed Financing from Global Founders Capital

Tel Aviv's [Bliss](#), a social selling platform, has secured \$1 million in pre-seed financing led by Global Founders Capital (GFC). The round should wrap up in the next few weeks. Founded a few months ago, the startup is cashing in on the social e-commerce trend, wherein individuals and small businesses can generate income on social media by promoting and selling products from other brands.

Bliss wants to connect these middlemen with brands and manufacturers, and also with a base of buyers. To that end, the company is creating sales and promotion tools, specifically making it easier to resell via mobile chat apps such as Facebook Messenger and WhatsApp. The business model combines a SaaS subscription and a small commission for each closed deal.

Bliss has developed a mobile platform that enables individuals and small businesses to generate income by reselling products over mobile chat and social network apps such as Facebook Messenger, WhatsApp, and others. The company provides its users with promotion and sales supporting capabilities, including payment solutions and client management tools. The business model combines a Software-as-a-Service (SaaS) subscription and a small commission for each closed deal. (Bliss 01.04)

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2.5. Cyolo Raises \$4.2 Million to Provide Boundless Secure Business Connectivity

Cyolo came out of stealth mode with a \$4.2 million seed round, led by Flint Capital, with participation by Global Founders Capital, Differential Ventures and private investors. Cyolo's unified network and security platform creates a secure digital path that connects authorized users to approved resources, to ensure business continuity. Cyolo's solution minimizes the attack surface and reduces the risk to an organization's critical assets and data in an era where users are everywhere and resources are scattered across platforms. In today's COVID-19 reality, Cyolo is enabling its customers to ensure secure remote access to employees who work from home, using their personal devices.

Cyolo's secure access platform ensures risk-based access and action control by providing granular visibility and control per application, based on user ID, device ID, time, location, behavior and action. Cyolo is currently deployed in organizations with thousands of users, in multiple sectors and the funding will be used to grow the team, accelerate development efforts and expand into new markets.

Ramat Gan's [Cyolo](#) was founded in 2019 by former commanders of the Israeli Navy Cyber Unit to help organizations remain agile, resilient and productive, by securely connecting onsite and remote users, to the organization's applications, servers, desktops and files. (Cyolo 06.04)

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2.6. Cato Networks Secures \$77 Million Investment in its Largest Funding Round

Cato Networks announced an investment of \$77 million led by Lightspeed Venture Partners with the participation of Aspect Ventures, Greylock Partners, Singtel Innov8, U.S. Venture Partners (USVP) and Shlomo Kramer. This investment brings the total funding raised to date to over \$200 million. It comes on the heels of an incredible year that saw a 220% increase in bookings and a very strong Q1/20.

Unlike legacy networks built from multiple point-solutions and telco services, Cato connects and secures the entire enterprise – remote users, sites, applications, and clouds with a global cloud service. Cato is the first true implementation of Gartner's Secure Access Service Edge (SASE) framework that describes an architecture that converges SD-WAN and network security for all enterprise "edges" into the cloud.

Tel Aviv's [Cato Networks](#) is the world's first SASE platform, converging SD-WAN and network security into a global, cloud-native service. Cato optimizes and secures application access for all users and locations. Using Cato, customers easily migrate from MPLS to SD-WAN, optimize connectivity to on-premises and cloud applications, enable secure branch Internet access everywhere, and seamlessly integrate cloud datacenters and mobile users into the network with a zero-trust architecture. (Cato Networks 07.04)

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2.7. Energean Raises North Karish Gas Estimate 32%

Energean Oil and Gas has raised its estimate of the amount of energy resources in the Israeli offshore Karish North field by 32%. The Greek energy company announced the completion of an independent Competent Persons Report (CPR) by DeGolyer and MacNaughton (D&M), which found 33.7 billion cubic meters (BCM) of natural gas in the offshore Israeli field and 250 million barrels of oil (80% of which was gas). Energean said that its total resources in the Karish, Tanin and Karish North fields are now estimated to be almost 99 BCM of gas, and 698 million barrels of oil (88% of which is gas). Energean said it will submit an addendum to its Field Development Plan for Karish North to Israel's Ministry of National Infrastructures, Energy and Water Resources. Energean's share price rose 9.75% on the London Stock Exchange with the announcement, to £822, giving a market cap of £1.456 billion. (Energean 09.04)

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2.8. Tonkean Raises \$24 Million Series A for Adaptive Business Operations

Tonkean announced the completion of a \$24 million Series A round, led by Lightspeed Venture Partners, to introduce Adaptive Business Operations (ABO) software to enterprises. Foundation Capital, who led Tonkean's \$7.2 million seed round last year, also participated along with Magma Venture Partners and Slow Ventures.

What operations teams need is a new type of software designed to allow them to quickly deliver tailored solutions that optimize their unique set of processes, people, and systems—without relying on engineering resources. To this end, Tonkean has evolved and expanded upon its human-in-the-loop robotic automation technology to create a new, more dynamic and flexible category of software: Adaptive Business Operations, or ABO. At the center of ABO are adaptive modules, a new type of software entity that focuses on the business logic of a particular process. Unlike apps, adaptive modules can flexibly connect to the interfaces users already use - forms, email, chat or other tools - based on the needs and preferences of each individual. Each adaptive module can also connect with +1,000 different enterprise systems or databases behind the scenes to push and pull data.

Tonkean's no-code platform enables operations teams to quickly create adaptive modules to solve their unique challenges in a way that doesn't require new systems or engineering work. By leveraging the platform, businesses of all sizes can drive faster SLAs, higher customer satisfaction, and greater efficiency. Fast-growing startups can adapt more quickly to changing business demands and Fortune 100 enterprises can drive efficiencies with minimal change management.

[Tonkean](#) is the operating system for operations teams. Its Adaptive Business Operations platform gives business and functional operations teams the power to build a foundation for their unique set of systems, people, and processes to drive efficiency, flexibility and scale. Founded in 2015, Tonkean is headquartered in San Francisco with R&D in Tel Aviv. (Tonkean 08.04)

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2.9. Elementor Named 2020 King of WordPress Plugins

Elementor has won the championship round of WP Engine's 5th Annual Plugin Madness and has been crowned the 'King of WordPress Plugins'. Plugin Madness is a bracket-style competition that starts off with 64 nominated plugins (out of 55,000 WordPress plugins) split into 4 groups: eCommerce, Maintenance, Optimization, and Marketing. Plugins are divided into brackets and supporters of each plugin vote for their favorite. The competition announced Elementor as the 2020 champion against Custom Post Type Extended, a plugin that helps with the posting process.

Before reaching the championship round, Elementor overcame five different competitors. In Round 1, they defeated Wordfence who provide malware protection for WordPress sites. Round 2 was against All-In-One WP Migration, which allows users to import old WordPress sites to replace or support new ones. Round 3 featured Advanced Custom Fields as the competitor, this plugin gives users the ability to take control of their custom fields and edit screens. In Round 4, Elementor competed with Defender, another WordPress cybersecurity site. The semifinals brought Elementor head to head with another one of the biggest names in WordPress, WooCommerce, an online store builder. Elementor won with 82% of the votes.

Tel Aviv's [Elementor](#) is the leading website builder platform on WordPress. Serving over 4.5 million websites, Elementor serves a rapidly growing customer base of web professionals including web developers, designers, and marketers in 152 markets, and boasts a new website created every 10 seconds on its open-source platform. Elementor's mission is to radically simplify web building, enabling web professionals and agencies to unleash their creative and business potential. (Elementor 13.04)

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2.10. BioCatch Closes on \$145 Million Investment Led by Bain Capital Tech Opportunities

BioCatch completed a \$145 million Series C investment led by Bain Capital Tech Opportunities, the growth investing business of Bain Capital. Also joining the round are new investors including Industry Ventures as well as existing shareholders American Express Ventures, CreditEase, Maverick Ventures and OurCrowd, among others. The investment will accelerate BioCatch's rapid growth, broaden its product offerings and further support its expanding client base into new verticals.

BioCatch's category-defining behavioral biometrics technology seeks to protect some of the world's largest financial institutions, their clients and their clients' assets from fraud and other types of criminal activity, including sophisticated social engineering voice scams. Unlike traditional security methods such as usernames and passwords, which are easily compromised, behavioral biometrics monitors user behavior throughout each online session, providing continuous protection and ensuring a secure and seamless online experience. The company grew annual recurring revenues by 150% in 2019 and now counts more than 40 of the world's largest global financial institutions as customers.

Tel Aviv's [BioCatch](#) pioneered behavioral biometrics, which analyzes an online user's physical and cognitive digital behavior to protect users and their data. Today, customers around the globe leverage BioCatch's unique approach and insights to more effectively fight fraud, drive digital transformation and accelerate business growth. With nearly a decade of data, more than 40 patents and unparalleled experience analyzing online behavior, BioCatch is the leader in behavioral biometrics. (BioCatch 15.04)

3. REGIONAL PRIVATE SECTOR NEWS

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3.1. Ship Loaded with 38,000 Tons of Ukrainian Maize Docks in Aqaba

It was announced that a ship laden with 38,000 tons of Ukrainian maize has docked in the port of Aqaba. The private sector imported the Ukrainian maize, which was unloaded after the required laboratory tests to determine the shipment's standards was completed. The port set up an emergency plan to face the repercussions of the COVID-19 outbreak, to maintain the sustainability of port handling operations, and to carry out comprehensive ports' sterilization, while applying strict safety and public safety standards. (Petra 01.04)

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3.2. Pure Harvest Smart Farms Raises \$20.6 Million in Series A Funding

Abu Dhabi's [Pure Harvest Smart Farms](#), the Arabian Gulf's leading tech-enabled agribusiness, secured a multi-stage investment commitment valued at over \$100 million with Wafra International Investment Company, a wholly owned subsidiary of The Public Institution for Social Security. The strategic investment from Wafra will drive the Company's development and deployment of advanced controlled-environment agriculture solutions across the region to sustainably grow premium quality fresh fruits & vegetables—regardless of outdoor climate conditions. Pure Harvest designs, builds and operates high-tech, climate-controlled greenhouse systems that convert the region's abundant natural sunlight into premium quality, pesticide-free fresh fruits & vegetables. With core innovations in climate management solutions to maximize control of humidity and temperature, Pure Harvest has proven that it can create an optimal growing environment anywhere using substantially less water than traditional forms of agriculture.

Wafra is an asset management firm with assets under management of approximately \$6 billion across a variety of investment strategies. (Pure Harvest 06.04)

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3.3. Mamo Pay Raises \$1.5 Million to Revolutionize MENA Payments

Dubai's [Mamo Pay](#), the peer-to-peer payments app, has raised \$1.5 million from investors supporting its efforts with partners and regulators in the run-up to launch this year. Global Founders Capital (GFC) led the investment round, with Global Ventures, VentureSouq, MSA Capital, Dubai Angel Investors (DAI), 500 Startups and angel investors also participating. Founded by former Google employees, Mamo Pay will enable payments to family, friends and businesses with just a few taps - and zero fees. With the team working alongside regulators from the outset, Mamo Pay users can look forward to both secure and faster methods of payment without the need for IBAN numbers, as transfers can be completed using nothing more than a phone number or email address.

The financial services industry typically adopts a money-first rather than a customer-first approach. Mamo Pay, on the other hand, has a more empathetic vision that champions mindful finance. The Arabian Gulf's cash-based economy - partly caused by low-income workers who are unable to open traditional bank accounts - is another issue that the Mamo Pay team wants to overcome. Mamo Pay is currently testing on Android in run-up to launch this year, followed by iOS and web versions. (Mamo Pay 08.04)

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3.4. Hotel Data Cloud Raises \$350,000 in Seed Financing

Dubai's [Hotel Data Cloud \(HDC\)](#) has successfully secured \$350,000 in seed funding from both local and international investors, to support hotels in re-engaging with customers in post COVID-19 recovery. Ensuring that potential travelers are informed and always up to date, HDC is a centralized global database for descriptive hotel content that disseminates hotels' information and pictures across all major travel websites, travel agent databases and points of sale. With the hotel industry reeling from the economic downturn of COVID-19, the funding will assist HDC in accelerating the introduction of its Artificial Intelligence (AI) and Machine Learning (ML) based recommendation engine, specifically designed to help hotels overcome a range of pain points, as well as reach a wider customer base, once people start traveling again.

The new AI and ML engine will enable hotels to showcase tailor-made offers, amenities and other important factors, according to each travelers' specific requirements and personal preferences. By building and constantly updating customer profiles that are based on analytics, psychographics and other meta-data, customers are not inundated with irrelevant information. Instead, the engine filters all the information to arrive at an edited and curated selection of content that allows travelers to make informed decisions quickly. It is estimated that with this technology, the CTR (click through rate) across on-line bookings will increase by over 35%. HDC has a portfolio of over 11,400 hotels in 153 countries. (Hotel Data Cloud 12.04)

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3.5. SARY Secures \$6.6 Million in Series A Funding from Raed Ventures

Sary announced a Series A investment of \$6.6 million led by Raed Ventures, with participation from MSA Capital and Derayah Ventures. The Saudi-based startup was founded in 2018 to fix the broken supply chain in the wholesale industry. Customers can order wholesale items directly from their devices, ranging from a dozen packs of cereals, to a truck of mixed stock, and take delivery within three hours. Sary's app has attracted more than 20,000 downloads by SME owners, and served mini-market chains, convenience shops 'Bakala', and HoReCa in 15 KSA cities over the last 12 months.

Sary is in the process of expanding its Saudi footprint, with two new offices planned by the end of this year, catering to an additional 25 cities. The investment will also support the development of new revenue streams, the creation of an enhanced product roadmap, and the optimization of an innovative user experience, taking Sary to untapped customer segments.

Riyadh's [Sary](#) is an on-demand B2B marketplace platform connecting small businesses with wholesalers via mobile and web applications. The company aims to empower small businesses in making smarter purchasing decisions while procuring their supplies. (SARY 02.04)

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3.6. Splice Machine Launches Middle East Operations in Saudi Arabia

San Francisco's Splice Machine, a leading scale-out SQL database with native machine learning, announced that it has established a Middle East presence in Riyadh, Saudi Arabia. The new regional office will focus on providing predictive maintenance for outage avoidance for the oil & gas, renewable energy, communications and petrochemical industries. Splice Machine will leverage its unique converged database platform to address some of these industries toughest challenges including predicting equipment failures, eliminating avoidable downtime, and reducing corrosion. Splice Machine will also focus its efforts on reducing the pain experienced by network-intensive industries including utilities and telecom to optimize load, yield, resource efficiency, and asset reliability. (Splice Machine 15.04)

4. CLEAN TECH & ENVIRONMENTAL DEVELOPMENTS

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4.1. Israel Sets New All-Time Record in Using Renewable Energies

On 5 April, Israel set a new record for the production of renewable energy, the Israel Electrical Company announced. The peak was set at 1,610 MW, accounting for 27% of the nation's total production. The previous record for renewable energy production was set in March and stood at 1,599 MW. Daily renewable energy production averages at 10.4%

The Israeli government hopes to generate a higher percentage of its energy from renewable sources and is developing several projects to ensure this, including a 240 meter tall solar tower in the south which can generate up to 121 MW of power, providing about 1% of Israel's electricity consumption. In January, the Ministries of Energy, Defense, and Finance and the Electricity Authority signed a framework agreement to allow hundreds of wind turbines to be built in the north of the country. (TPS 06.04)

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4.2. GCC Sees Drop in Air Pollution Amid COVID-19 Lockdowns

The GCC countries have seen a drop in nitrogen dioxide (NO₂) concentration between 26 November 2019 and 27 March 2020, according to an image released by the Mohammed Bin Rashid Space Centre (MBRSC). The drop in levels beginning late-February coincides with precautionary measures such as lockdowns that were introduced by countries around the region to prevent the spread of coronavirus.

NO₂, which is mainly produced through engines, power generation and other industrial processes, decreased a result of the lockdowns, which saw fewer vehicles on the roads and even fewer planes taking flights. The reduction has, in turn, improved air quality.

In March, NASA and the European Space Agency noticed a dramatic drop in NO₂ emissions in China after its lockdown in February. They also saw similar decreases in air pollution over Northern Italy a few weeks later. (AB 01.04)

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4.3. Consortium Closes for \$400 Million Oman Solar Power Plant

A consortium consisting of Saudi-based Acwa Power, Gulf Investment Corporation (GIC) and Alternative Energy Projects Company (AEP) has achieved financial closure for the 500 MW Ibra II solar project in Oman. Located around 300 km. west of Muscat, the \$400 million Independent Power Project (IPP), which

will be Oman's largest utility scale solar plant, is being developed on a BOO (build, own, operate) basis and is to be funded on a debt equity ratio of 70:30.

A syndicate of six international and local lenders, will provide the \$275 million senior debt. Mandated lead banks included, Asian Infrastructure Investment Bank (AIIB), Bank Muscat, Riyadh Bank, Siemens Bank, Standard Chartered Bank and Warba Bank. At peak generation capacity, the plant output will be enough to supply an estimated 33,000 homes with electricity and will offset 340,000 tonnes of carbon dioxide emissions a year. (AB 06.04)

5. ARAB STATE DEVELOPMENTS

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5.1. Jordan's Inflation Rate Rises by 1.88% in First Quarter of 2020

Jordan's consumer price index (CPI) rose by 1.88% in the first quarter of 2020 to reach 101.71%, compared to 99.83% for the same period in 2019, according to the Department of Statistics (DoS). The CPI rose by 2.07, to stand at 102.05% in March compared to 99.98 in the same month last year, according to a monthly report issued on 13 April. On a monthly basis, the CPI reached 102.05 in March compared to 101.52 in February of the same year, an increase of 0.52%.

The CPI (measured by excluding commodities such as food, fuel, lighting and transportation, whose prices are constantly changing) stood at 68.28% in March compared to 67.24% in the same month last year, reporting an increase of 1.22%, according to the report. On the cumulative level, the CPI for the first quarter of 2020 rose by 19.1%, to reach 68.24% compared to 67.44% compared to the same period last year. (Petra 13.04)

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5.2. Jordan's Trade Deficit Declined Last January by 23.2%

In January 2020, Jordan's trade deficit dropped to JOD587.7 million, or 23.2%, compared to the same period in 2019, according to the Department of Statistics (DoS) monthly report on foreign trade. The value of total exports during January, 2020 amounted to JOD500 million, an increase of 18.3% compared to the same period last year, added the report.

The value of national exports during January 2020 reached JOD433.8 million, an increase of 20.6%, compared to the same period last year, while the value of re-exports reached JOD66.2 million during January 2020, an increase of 4.7% compared to the same period last year. As for imports, their value amounted to JOD1.088 billion during January 2020, a decrease of 8.5% compared to the same period last year, the report showed. (Petra 09.04)

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5.3. Central Bank of Jordan Launches JOD500 Million Finance Facilitation Program for SMEs

The Central Bank of Jordan (CBJ) decided to launch a JOD500 million Finance Facilitation Program to support small and medium enterprises (SMEs) with the guarantee of the Jordan Loan Guarantee Corporation (JLGC). The program aims to address the novel coronavirus (COVID-19) crisis and to facilitate financing for professionals, craftsmen and owners of individual institutions and SMEs and to enable them to obtain financing on favorable terms and costs as well as helping these groups to cover their financing needs for the purposes of financing operating expenses, working capital and fixed assets. This program also aims to enable these economic sectors to maintain their business and employees, continue their activities, provide their services during these conditions, and also enabling them to resume their activities at natural levels and expand their business during the coming stages. Under the program, loans will be

granted at low costs, not more 3.5%, in addition, level of loan guarantees reaches 85%, compared to 70% for regular programs and a grace period of one year.

The CBJ launched a package of precautions to contain the negative consequences of the COVID-19 crisis on the performance of the local economy. The package includes allowing banks to restructure the loans of individuals and companies, especially medium and small, that were affected by the consequences of this virus, in addition to pumping additional liquidity to the national economy at a value of JOD1050 million through reducing mandatory cash reserves, reducing financing costs, increasing the deadlines for existing and future facilities for the economic sectors, and supporting the procedures of the JLGC. (Petra 01.04)

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5.4. EU Grants €60.5 Million to Jordan to Finance Three Projects

Jordanian Minister of Planning and International Cooperation Rabadi said the European Union Regional Trust Fund to Respond to the Syrian Crisis (MADAD) has allocated grants to Jordan worth €60.5 million to enable the government to deal with the ongoing consequences of the Syrian crisis, hosting Syrian refugees, supporting host communities and the Treasury under the current conditions. The minister said the new aid package will be directed to finance the implementation of three priority projects, so that the first grant, €22 million, will be allocated to the project "Supporting the health system services in Jordan to prevent and manage non-communicable diseases." The grant aims to improve the efficiency of primary health care services provided to Jordanians and Syrian refugees, to facilitate swift services delivery, increase their effectiveness, and support the health system as a result of the Syrian crisis.

The second grant, worth €11 million, will be allocated to the project "Supporting the economic empowerment of women in Jordan" with the aim of improving the economic empowerment of Jordanian women in the communities hosting Syrian refugees and their ability to access employment and small businesses in Jordan. The third grant, worth €27.5 million, will be provided as sectoral support through the general budget, which will cover the academic year 2021-2022 to support the government's efforts to improve the quality of education for Syrian refugee children in the camps. (Petra01.04)

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5.5. Iraq's Oil Revenues Almost Halved in March

Iraq's oil revenues fell by almost half in March compared to February's figures, Baghdad officials said, underscoring the financial difficulties ahead. Oil revenues account for roughly 90% of Iraq's annual budget. Iraq's oil revenues for the month of March were \$2.98 billion, with an average export of 3.390 million barrels per day (bpd). By contrast, Iraq's oil revenues for the month of February stood at \$5.52 billion, with an average export of 3.391 million bpd.

According to oil ministry figures, Iraq increased oil production in March by around 7 million barrels compared to February. However, as world oil prices tumbled, its revenues actually fell. A barrel of Iraqi oil sold for an average of \$28.436 in March, down from an average of \$51.374 in February.

World oil prices almost halved last month as a result of a standoff between oil producing rivals Saudi Arabia and Russia, floating just shy of \$20 a barrel. For smaller oil producing nations like Iraq, the standoff has proved disastrous. Already locked in a political crisis and battling an outbreak of coronavirus, Iraq will be forced to borrow or spend its foreign reserves to keep its head above water. Last month, Haitham al-Jiboury, head of the Iraqi parliament's finance committee, said he foresees a deficit of around \$42 billion in the 2020 budget plan. If oil prices remain this low, that deficit could rise to more than 100 trillion dinars. (Rudaw 02.04)

►► Arabian Gulf

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5.6. ADIO Investment Brings Four AgTech Pioneers to Abu Dhabi

Four agriculture technology (AgTech) pioneers are to build new facilities in Abu Dhabi dedicated to developing next generation agriculture in arid and desert agriculture. The Abu Dhabi Investment Office (ADIO) has partnered individually with AeroFarms, Madar Farms, RNZ and Responsive Drip Irrigation (RDI) to establish new R&D and production facilities in the emirate, turning sand into farmland, solving complex global agriculture challenges and expanding the profile of local food producers. ADIO launched a targeted incentive program in 2019 to accelerate the growth of the emirate's burgeoning (AgTech) ecosystem and promote innovation that is locally relevant and globally exportable. ADIO will invest \$100 million in total in the four companies to build facilities in Abu Dhabi, each tasked with solving regional and global challenges.

Newark, New Jersey's [AeroFarms](#) will focus on next-generation genetic phenotyping and organoleptic research while also tackling the challenges of desert agriculture from its new 8,200 sq. m. R&D center in Abu Dhabi. The center will be the largest indoor vertical farm of its kind in the world and will employ a projected +60 highly skilled engineers, horticulturists and scientists. Dubai's [Madar Farms](#) will build the world's first commercial-scale indoor tomato farm using only LED lights in KIZAD. The company is also set to scale up the commercialization of microgreen growing to help provide a consistent and predictable local food supply that responsibly uses the region's natural resources.

Florida's [RDI](#) is developing an innovative irrigation system to transform water usage in UAE agriculture and conducting research trials to increase crop yields in sandy soils and non-arable land. Dubai's [RNZ Group](#) will set up a state-of-the-art R&D center to research, formulate and commercialize 'agri-input' solutions that will help to grow more with less.

The competitive ADIO packages of cash and non-cash incentives awarded to the companies include rebates of up to 75% on R&D expenditure upon commercialization of new solutions developed in Abu Dhabi. The packages are being dispersed as part of ADIO's \$272 million AgTech Incentive Programme, established a year ago under the Abu Dhabi Government's Ghadan 21 Accelerator Programme that is focusing on economic, knowledge and community development across the emirate. To date, ADIO has allocated approximately 40% of the AgTech Incentive Programme funding in the first year of the three-year program. The program is open to local and international companies looking to establish and grow a presence in Abu Dhabi. (ADIO 09.04)

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5.7. Riyadh Says Only Saudis May Work for Ride-Hailing Companies like Uber & Careem

On 1 April, the Saudi Arabian government said that only Saudi nationals will be allowed to work for ride-hailing companies in future, a move aimed at creating jobs for young people in the private sector. Finding jobs for hundreds of thousands of unemployed Saudis is a major challenge for Crown Prince Mohammed bin Salman, who oversees economic policy for the world's top oil exporter, where unemployment currently stands at 12%. Minister of Human Resources and Social Development al-Rajhi said the move would help boost the income of young Saudis. The Human Resources Ministry has previously restricted employment in a number of retail sectors and sub-sectors to Saudis only, such as in shops selling furniture, car parts, watches, spectacles or sweets. The government aims to create 1.2 million jobs for Saudi nationals by 2022 and cut their jobless rate to 9% by the same year and then to 7% by 2030. (Al-Arabiya 01.04)

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5.8. Saudi Government to Cover 60% of Private Sector Salaries Hit by COVID-19

Saudi Arabia's King Salman announced on 3 April that the government will cover 60% of salaries in private sector industries hit by the COVID-19 pandemic. The move is part of a SAR 9 billion (\$2.4 billion) economic package, and allows companies forced to consider staff lay-offs to apply for government aid of up to SAR 9,000 for the next three months. It comes as the kingdom's virus cases hit 1,885 with 21 reported deaths.

Finance Minister Mohammed Al Jadaan urged private sector companies to avoid laying off staff during the outbreak, adding that the new package, which will cover 1.2 million Saudis, will be managed through the national unemployment assistance system Sanad, and could extend beyond the three-month time limit. The first payments will be sent to companies on 3 May, he said.

Saudi Arabia had announced various economic measures to help companies hit by the spread of the virus, with a SAR 70 billion package exempting them from some taxes and fees, and a further SAR 50 billion package sent to banks and financial institutions to help small and medium enterprises. On 2 April, the government extended curfews in several areas, with the holy cities of Makkah and Madinah now under a 24-hour curfew. (AB 05.04)

►► North Africa

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5.9. Egypt's Annual Core Inflation on Hold at 1.9% in March

On 9 April, Egypt's annual core inflation remained unchanged in March at 1.9%, the Central Bank of Egypt (CBE) announced. The CBE added that its consumer price index (CPI) inched up to 0.4% in March, compared to 0.2% in February and 0.5% in March 2019. The CBE's Monetary Policy Committee (MPC) decided in its last meeting on 2 April to maintain interest rate, after it had presented a major surprising cut of 300 basis points earlier in March. The CBE slashed the overnight deposit rate, the overnight lending rate, and the rate of the main operation to 9.25%, 10.25%, and 9.75%, respectively. In addition, the discount rate was also reduced to 9.75%.

Earlier, the Central Agency for Public Mobilization and Statistics (CAPMAS) announced that the annual inflation fell to 4.6% in March, compared to 4.9% in February and 13.8% in March 2019. Moreover, the urban CPI inflation in Egypt has declined to 5.1% in March, compared to 5.3% in February. On a monthly basis, consumer prices inched up 0.6% in March, after being flat in the preceding month. The agency said that the core consumer prices in Egypt totaled 105.8 points in March, an increase of 0.6% compared to February. Inflation figures remain within the CBE's target of 9% ($\pm 3\%$). (CBE 09.04)

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5.10. Egypt's Non-Petroleum Exports Increase By 2% While Imports Fall by 24% in First Quarter

Egypt's non-petroleum exports increased by 2%, recording \$6.728 billion during the first quarter of 2020, up from \$6.58 billion during the same period of 2019, according to Egypt's External Trade Indices report. According to the report issued by the General Organization for Export and Import Control (GOEIC), Egypt's imports dropped significantly by 24% to record \$13.814 billion in Q1/20, down from \$18.233 billion in the same period of 2019. Minister of Trade and Industry Gamea said these indices have contributed to reducing Egypt's trade balance deficit by \$4.566 billion, declining by 39% in Q1/20 in comparison to the same quarter of 2019.

Gamea stated that these positive indices were recorded despite the harsh conditions the global economy is witnessing owing to the COVID-19 outbreak. She added that the indices reflect the success of the trade ministry's strategy and the business community in resuming production to preserve Egypt's export market and increase the reliance on national products to meet the needs of the domestic market.

According to the report, construction materials were at the top of Egypt's exports in Q1/20 with \$1.527 billion, followed by chemicals and fertilizers with \$1.252 billion, food stuffs with \$881 million, crops with \$821 million, and electronics, engineering products with \$548 million. On the other hand, five sectors witnessed a significant decline in their imports in the first quarter compared to the same period of 2019, including construction materials with \$1.879 million, down from \$2.844 million with a decline of 34%, in

addition to furniture imports that recorded \$239 million, down from \$369 million with a decline of 35%. Imports of medical industries also declined to \$639 million, down from \$951 million with a drop of 33%.

The report also showed that the United Arab Emirates, the US, Italy, Saudi Arabia, and Spain were the top markets to receive Egypt's exports during Q1/20 with \$747 million, \$381 million, \$385 million, \$380 million, \$241 million respectively. China, U.S, Germany, India, and Russia were the top exporting countries to the Egyptian market with \$2.336 billion, \$938 million, \$879 million, \$713 million, and \$701 million respectively. (GOEIC 15.04)

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5.11. Egypt's Tourism Revenues Expected to Fall by \$5 Billion Due to COVID-19

Egypt's Minister of Planning Hala El-Said said on 13 April that tourism revenues in the current fiscal year (2019/20) are expected to reach about \$11 billion instead of the \$16 billion expected before the outbreak of the coronavirus. The minister did note, however, that a degree of growth rate recovery is expected by the second half of the upcoming fiscal year. The minister's remarks came during a press conference to review the implications of the coronavirus outbreak on the economy in Egypt and elsewhere.

El-Said noted that the indicators of the Egyptian economy were at their best during the first half of the current fiscal year in terms of economic growth, unemployment, inflation and tourism revenues. He said Egypt reached 5.6% economic growth in the first half of the current fiscal year, compared to 5.4% in the same period of 2018. The investment rate also increased to 18.5% compared to 16.9% during the same period.

The Egyptian tourism sector, one of the country's main sources of foreign currency, achieved revenues of \$13 billion in 2019, a 12% increase compared to 2018. The sector had begun to show signs of recovery after the years of political turmoil that followed the 2011 uprising. In 2015, several countries had banned direct flights to the Red Sea resort city of Sharm El-Sheikh after a Russian plane crashed minutes following takeoff from Sharm El-Sheikh airport, killing all 224 people on board. Many countries resumed air traffic in the following years.

Earlier this month, the International Air Transport Association said that Egypt's airline industry faces a potential loss in revenue of \$1.6 billion and 9.5 million fewer passengers in 2020 due to the coronavirus crisis. Egypt has imposed a night-time curfew, banned large public gatherings, and closed schools and universities in an effort to stem the spread of the virus. The country also suspended international flights at all airports since 19 March. (Ahram Online 13.04)

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5.12. Morocco Draws on IMF Funds Available to Address COVID-19 Pandemic

On 7 April, the Moroccan authorities drew on all resources available under the current Precautionary and Liquidity Line (PLL) arrangement in the amount of SDR 2.15 billion (about \$3 billion or 240% of quota and about 3% of GDP). This purchase will help the authorities limit the social and economic impact of the COVID-19 pandemic and allow Morocco to maintain an adequate level of official reserves to mitigate pressures on the balance of payments.

Since 2012, Morocco has benefited from four successive PLL arrangements with the IMF. The PLL instrument is precautionary and designed to meet the liquidity needs of member countries with sound economic fundamentals but with some remaining vulnerabilities. It provides rapid access to Fund resources in the event of external shocks or a worsening global environment.

This is the first time Rabat drew on funds available under the PLL to cope with the unprecedented shock of the COVID-19 pandemic, including both its domestic impact and spillovers from a global recession. Despite a range of measures taken by the authorities to increase health spending and support businesses and

households, Morocco is likely to experience a recession in 2020 due to sizable declines in exports, tourism and remittances and a temporary freeze in economic activity. The IMF will remain closely engaged with Morocco as the authorities address the impact of the pandemic. (IMF 08.04)

6. TURKISH, CYPRIOT & GREEK DEVELOPMENTS

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6.1. Turkey Budget Deficit Widens to Record High as Spending Surges on COVID-19

Turkey posted a record budget deficit in March as the government sought to combat the impact of the COVID-19 virus by increasing spending. The deficit grew to TL 43.7 billion (\$6.4 billion) last month from TL 24.5 billion in the same month of 2019, the Treasury and Finance Ministry said. Spending, excluding interest payments on debt, surged by 18%. The deficit for March was equal to more than one-third of the total deficit for 2019 of TL 123.7 billion.

Turkey is seeking to stimulate the economy to help cushion the spread of the coronavirus. Steps include delays to company tax and social security payments, financial help for the newly unemployed and debt restructuring. Budget revenue slumped by an annual 13% as many companies temporarily ceased or cut back operations and consumers observed a partial lockdown. The figure was far greater in real terms when including annual consumer price inflation of 11.9%. Tax income slid 10%. (Ahval 15.04)

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6.2. Cyprus to Export Kosher Meat to Israel

Cyprus aims to help hundreds of farmers affected financially by the COVID-19 crisis to export kosher sheep and goat meat to Israel during the health emergency. According to a bill submitted to parliament, it amends the existing law to allow slaughtering animals in accordance with traditional Jewish practice and the possibilities provided by EU Council Regulation (EC) No 1099/2009. The aim of this temporary measure is to address the negative effects of reduced demand for meat resulting from social distancing measures to address the coronavirus pandemic in Cyprus. This amendment is adopted as an emergency measure to deal with the effects of the pandemic and will be active until 31 December 2020.

Animal breeders demanded this export possibility from the Agriculture Ministry, as a way out from the problems arising from falling demand due to the closure of hotels and restaurants amid the coronavirus outbreak. The option of exports to Israel will help around 2,500 farmer families to secure a better price for their livestock. It will also benefit the Cypriot economy, bringing revenue and foreign exchange to the country. This meat could also be exported to other countries besides Israel, while it can also be used for the needs of the domestic Jewish community and the significant number of Israeli tourists who visit the island every year. (CAN 10.04)

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6.3. Amid Pandemic, Greece Raises €2 Billion in 7-Year Bond

Greece raised €2 billion (\$2.2 billion) on 15 April with a 7-year bond auction, a result the government hailed as confirmation of market confidence during difficult times created by the coronavirus pandemic. Greek Finance Minister Staikouras said the issue carried a 2% yield, and he described the outcome as satisfying given that a similar issue in July 2019 "in a much better economic environment" carried the same yield. Greece decided to tap markets taking advantage of an improvement in borrowing rates driven by massive European stimulus packages to address the impact of the coronavirus.

Staikouras has said he expects the economy to contract by 5-10% this year due to the effects of the pandemic before rebounding in 2021. Greece is particularly dependent on revenue from tourism, an industry that has been clobbered by travel bans and other restrictions to curb the spread of the virus. The

pandemic is expected to significantly increase unemployment — already the highest in the European Union at more than 16%. The International Monetary Fund has projected a 10% recession for this year, and a rise in unemployment to 22%. (eKathimerini 15.04)

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6.4. Athens to Bridge Gap Left by Private Sector

From mid-March up until the end of May at the earliest, Athens looks set to be the main – if not the only – income provider for about 3 million households in Greece, or 70% of all families. The reduction of the private sector's contribution toward the country's total income is unprecedented and the gap will have to be bridged (although not covered) by the state budget.

Besides the 2.5 million pensioners and at least 650,000 workers in the broader public sector, many hundreds of thousands of private sector workers must also be maintained via state cash. They constitute about 1.5 million private sector employees whose contracts have been suspended (over 650,000 private employees have already applied for the €800 handout), up to 750,000 self-employed professionals who in the coming days will apply either for the €800 benefit or a €600 voucher for scientific training and another 233,000 jobless people.

According to estimates by the ministries of Finance and Labor, up to 1.5 million workers may find themselves having been furloughed. As of this month, the list of enterprises considered harmed by the pandemic has expanded considerably. A worker who entered furlough status on 15 March received a portion of his salary in early April. At best, his suspension status will remain in force up to end-April, so the earliest time his employer could pay him a salary would be end-May.

Just a few hundred thousand employees in the private sector will receive their salaries as usual at the end of April and May, mostly at banks, supermarkets, etc., while tens of thousands will find themselves making only half their salary due to their employers' decision to put them on rotational employment, working for just two weeks a month. Given all of the above, April and May 2020 will go down in history for one more reason: the jump in the state's participation in the total income of citizens. (eKathimerini 13.04)

7. GENERAL NEWS AND INTEREST

***ISRAEL:**

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7.1. Yom HaShoah - Holocaust Martyrs' & Heroes' Remembrance Day 2020

Israel will mark Holocaust Martyrs' & Heroes' Remembrance Day (Yom HaZikaron HaShoah ve-laGvura in Hebrew) on Monday evening, 20 April and Tuesday, 21 April. Holocaust Remembrance Day (Yom HaShoah) is a national day of commemorating the six million Jews murdered in the Holocaust. It is a solemn day, usually beginning at sunset on Hebrew date of 26 Nisan and ending the following evening. The internationally recognized date comes from the Hebrew calendar and corresponds to the 27th day of Nisan on that calendar. It marks the anniversary of the 1943 Warsaw ghetto uprising. Some years the observance can be moved by a day later to prevent the desecration of the Sabbath in preparation for the memorial services.

Places of entertainment are closed and memorial ceremonies are held throughout the country. The central ceremonies, in the evening and the following morning, are held at Yad Vashem and are broadcast nationally on television. Marking the start of the day, in the presence of the President and the Prime Minister, dignitaries, survivors, children of survivors and their families, gather together with the general public to take part in the memorial ceremony at Yad Vashem in which six torches, representing the six million murdered Jews, are lit. The following morning at 10:00, the ceremony at Yad Vashem begins with the sounding of a siren for two minutes throughout the entire country. For the duration of the sounding, work is halted, people

walking in the streets stop, cars pull off to the side of the road and everybody stands at silent attention in reverence to the victims of the Holocaust. Afterward, there is a central ceremony at Yad Vashem, while other sites of remembrance in Israel, such as the Ghetto Fighters' Kibbutz and Kibbutz Yad Mordechai, also host memorial ceremonies, as do schools, military bases, municipalities and places of work. Throughout the day, both the television and radio broadcast programs about the Holocaust.

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7.2. Ramadan to Begin on Eve of 23 April

Ramadan 2020 is expected to start on Thursday night, 23 April and will continue for 30 days until the evening of 23 May (although this is subject to change because the dates are determined by the sighting of a new moon.). Ramadan is the ninth month of the lunar Islamic calendar, which lasts 29 or 30 days according to the visual sightings of the crescent moon according to numerous biographical accounts compiled in Hadiths. It is the Muslim month of fasting, in which Muslims refrain from dawn until sunset from eating, drinking and sexual relations. The *sawab* (rewards) of fasting are many, but in this month, they are believed to be multiplied. Muslims fast in this month for the sake of demonstrating submission to God and to offer more prayers and Quran recitations.

Ramadan is a time of spiritual reflection and worship. Muslims are expected to put more effort into following the teachings of Islam and to avoid obscene and irreligious sights and sounds. Purity of both thoughts and actions is important. The act of fasting is said to redirect the heart away from worldly activities, its purpose being to cleanse the inner soul and free it from harm. It also teaches Muslims to practice self-discipline, self-control, sacrifice and empathy for those who are less fortunate; thus encouraging actions of generosity and charity (*zakaat*).

It becomes compulsory for Muslims to start fasting when they reach puberty, so long as they are healthy, sane and have no disabilities or illnesses. The elderly, the chronically ill and the mentally ill are exempt from fasting, although the first two groups must endeavor to feed the poor in place of their missed fasting. Also exempt are pregnant women if they believe it would be harmful to them or the unborn baby, women during the period of their menstruation, and women nursing their newborns. A difference of opinion exists among Islamic scholars as to whether this last group must make up the days they miss at a later date, or feed poor people as a recompense for days missed. While fasting is not considered compulsory in childhood, many children endeavor to complete as many fasts as possible as practice for later life. Lastly, those traveling (*musaafir*) are exempt, but must make up the days they miss. Twelver Shi'a believes that those who travel more than 14 miles (23 km.) in a day are exempt.

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7.3. Israel Commemorates Those Who Fell in Service to the Nation

Israel's Memorial Day for Fallen Soldiers and Victims of Terrorism which will begin at sundown on 27 April, honors the soldiers who have fallen in the line of duty since 1860 (when modern-day Jews first lived outside of Jerusalem's Old City walls). The Memorial Day begins with a minute-long siren sounded at 20:00h, followed immediately by official events. On the following day, a two-minute siren will be sounded at 11:00 as part of Memorial Day ceremonies across the country. For the duration of the sounding of both sirens, work is halted, people walking in the streets stop, cars pull off to the side of the road and everybody stands at silent attention in reverence to the fallen soldiers and victims of terrorism.

A small flag a black ribbon will be laid on the grave of every soldier who died in the line of duty as an expression of respect and sympathy. Usually, more than a million people are expected to visit military cemeteries across the country, albeit restrictions due to the COVID-19 virus will affect observance this year. Though a regular work day, activity is usually curtailed and many leave their offices early pending the Independence Day celebrations that follow.

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7.4. Israel's Independence Day – 72 Years After Sovereignty was Regained

Celebrations for the 71st anniversary of Israel's regaining its independence will begin on Tuesday evening, 28 April throughout the country, continuing throughout Wednesday, 29 April. The official observance starts when the state flag is raised to full mast at a national ceremony on Mount Herzl in Jerusalem. Israel Independence Day is celebrated annually on 5 Iyar, which corresponded to 14 May 1948, the date the British mandate ended over the Land of Israel. A religious and national holiday, *Yom HaAtzmaut* - Independence Day is a celebration of the renewal of the Jewish state in the Land of Israel, the birthplace of the Jewish people. In this land, the Jewish people developed its distinctive religion and way of life. In the Land of Israel, the Jews preserved an unbroken physical presence, for centuries as a sovereign state, at other times under foreign domination. Throughout their long history, the yearning to return to the Land has been the focus of Jewish life. With the rebirth of the State of Israel, in 1948, Jewish independence, lost 1,878 years earlier, was restored.

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7.5. Israel's Sea of Galilee Inches Closer to Upper Red Line Threshold

The water level of Israel's Sea of Galilee (Kinneret) rose six centimeters (2.4 inches) over 10/11 April, bringing the water level to 209.01 meters below sea level (685.73 feet), the highest it's been since 2004. According to Israel's Water Authority, the Sea of Galilee is currently 21 centimeters (8.27 inches) below the upper red line which constitutes a full lake.

If Israel's largest freshwater lake would surpass the upper red line threshold, the Degania Dam will be opened and the water stream will be diverted to the Jordan River. In March, the Water Authority stated the dam would not open this year, after originally announcing in February that it would open if the lake would reach 20 centimeters below the upper red line. (i24NEWS 13.04)

***REGIONAL:**

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7.6. UAE Completed 95 Cloud Seeding Operations in First Quarter

The UAE has an average rainfall of 100 mm per year and its rain enhancement program is designed to safeguard water security. To that end, the National Centre of Meteorology (NCM) carried out 95 cloud seeding operations across the UAE in the first quarter of 2020. The NCM revealed that a total of 2,171 flares were produced by Emirates Weather Enhancement Factory. In January it was announced that the UAE is to invest \$136 million to protect the country from flooding. The funding was announced by the minister of infrastructure development following widespread damage caused across the country by heavy storms.

The success of cloud seeding requires advanced statistical operations and procedures, whereby cloud's seedability is evaluated through analyzing data from at least 150 cumulus clouds. Cumulus clouds are detached, individual, cauliflower-shaped clouds that are usually spotted in fair weather conditions. All cumulus clouds develop as a result of convection, and range at base heights of 1,000 meters, with a width of up to one kilometer. (AB 12.04)

8. ISRAEL LIFE SCIENCE NEWS

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8.1. BiomX Positive Data from Phase 1 Study for Lead Candidate BX001 for Acne-Prone Skin

BiomX announced positive topline results from its Phase 1 cosmetic clinical study of BX001 in subjects with acne-prone skin. The study met its primary endpoint of safety and tolerability for both doses of BX001, as well as a statistically significant ($p=0.036$) reduction of *Cutibacterium acnes* (*C. acnes*) levels for the high dose of BX001 compared to placebo. *C. acnes* are bacteria implicated in the pathophysiology of acne vulgaris.

BX001 is a topical gel comprised of a cocktail of naturally-occurring phage targeting *C. acnes* to improve the appearance of acne-prone skin. Following application of the gel once daily for four weeks, measurement of *C. acnes* levels using qPCR showed a statistically significant reduction of *C. acnes* levels in the high dose cohort of BX001 compared to placebo ($p=0.036$) at week five (one week after end of treatment), the final study time point. At this time point, a 0.12 log reduction, which translates to a 24% reduction in *C. acnes* levels, was observed in the high dose cohort compared to baseline, while a 0.1 log increase, which translates to a 26% increase from baseline, was observed in the placebo cohort. As anticipated for a relatively short-duration study of four weeks, exploratory endpoints measuring reductions in inflammatory and non-inflammatory lesions were not statistically significant versus placebo. The planned Phase 2 trial will have a 12-week duration similar to most acne studies and will be powered to demonstrate a clinical effect.

Ness Ziona's [BiomX](#) is a clinical-stage biotechnology company developing both natural and engineered phage cocktails designed to target and destroy bacteria that affect the appearance of skin, as well as harmful bacteria in chronic diseases, such as inflammatory bowel disease (IBD), primary sclerosing cholangitis (PSC), and colorectal cancer (CRC). BiomX discovers and validates proprietary bacterial targets and customizes phage compositions against these targets. (BiomX 30.03)

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8.2. Trendlines' ApiFix Acquired by OrthoPediatrics Corp.

The Trendlines Group announced the 100% acquisition of portfolio company ApiFix by Indiana's Nasdaq-traded OrthoPediatrics Corp, a company focused exclusively on advancing the field of pediatric orthopedics. The acquisition was signed and closed on 1 April 2020; Trendlines held 18.62% of ApiFix at closing.

The exit by Trendlines from its direct shareholdings of ApiFix pursuant to the Acquisition had contributed positively to the consolidated earnings per share and net assets per share of the Group for the financial year ended 31 December 2019. For the financial year ending 31 December 2020, Trendlines' ApiFix holdings will be converted into cash, short- and long-term receivables, and short- and long-term investments.

Founded in 2011 with investment from and the active involvement of Trendlines, in addition to support from the Israel Innovation Authority, Misgav's [ApiFix](#) is a leading motion-preservation scoliosis correction company; their Minimally Invasive Deformity Correction (MID-C) system has U.S. FDA and CE Mark approvals. When compared to both traditional spinal fusion and tethering procedures, the benefits of the MID-C system include measurable reductions in surgery time, blood loss, hospitalization, recovery time, and complication rates. Most significantly, the system is removable and avoids permanently limiting range of motion in these young patients.

Misgav's [Trendlines Group](#) is an innovation commercialization company that invents, discovers, invests in, and incubates innovation-based medical and agricultural technologies to fulfill its mission to improve the human condition. As intensely hands-on investors, Trendlines is involved in all aspects of its portfolio companies from technology development to business building. (The Trendlines Group 02.04)

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8.3. Therapix Biosciences Announces Pricing of its \$1.25 Million Public Offering

Therapix Biosciences announced the pricing of a public offering for the issuance of an aggregate of 4,166,668 units, each consisting of (i) one pre-funded warrant to purchase one American depositary share (ADS) and (ii) one Series B warrant to purchase one ADS, at a purchase price of \$0.2999 per unit. The Series B warrants will have an exercise price of \$0.43 per ADS, will be exercisable upon issuance and will expire five years from the date of issuance. The offering is expected to result in gross proceeds to Therapix of approximately \$1.25 million. Therapix intends to use the net proceeds from the offering for working capital and general corporate purposes, and pursuing strategic opportunities, including business combination transactions. The closing of the sale of the securities took place on 3 April 2020, subject to satisfaction of customary closing conditions. Roth Capital Partners is acting as the sole agent for the offering on a "best efforts" basis.

Givatayim's [Therapix Biosciences](#) is a specialty clinical-stage pharmaceutical company led by an experienced team of senior executives and scientists. Their focus is creating and enhancing a portfolio of technologies and assets based on cannabinoid pharmaceuticals. With this focus, the company is currently engaged in the following drug development programs based on tetrahydrocannabinol (THC) and/or non-psychoactive cannabidiol (CBD): THX-110 for the treatment of Tourette syndrome and for the treatment of obstructive sleep apnea; THX-160 for the treatment of pain; and THX-210 for the treatment of autism spectrum disorder and epilepsy. (Therapix Biosciences 01.04)

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8.4. Bat-Call's AI Based Infra-sound Auscultation Technology Fights COVID-19

Bat-Call will shift its technology to support the early detection and monitoring of COVID-19 allowing doctors to rapidly assess and diagnose patients with its artificial intelligence based smart auscultation device. Based on its patented AI infra-sound analysis and deep learning classification technologies, Bat-Call is providing breakthrough acoustic digital diagnostic systems, to help in the early diagnosis and management of chronic diseases such as pneumonia, asthma, COPD, congestive heart failure and can now support the early detection and monitoring of COVID-19 patients.

Bat-Call classification algorithm achieved 90% detection accuracy of pneumonia patients, compared to an average of 55% with traditional auscultation¹. According to recent articles, it appears that 83% of COVID-19 patients had fever, 82% had coughs, 31% with breathing difficulties, and only 9% with runny nose and 8% with sore throats.

Nesher's [Bat-Call](#) was founded in 2016 with the mission of enhancing primary diagnostics for health care professionals and patients with the world's first AI based infra-sound auscultation technology. Bat-Call products are accurate and easy to use, making diagnostics accessible everywhere. Capturing and analyzing full spectrum body sounds can provide critical medical information with the potential to improve lives while substantially reducing medical costs. The company is ISO 13485 certified, with several patents on its technology and operates in the multibillion-dollar primary care diagnostic devices market. (Bat-Call 01.04)

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8.5. IceCure Medical Receives Largest Order for ProSense Cryoablation System

IceCure Medical received its largest purchase order (PO) for ProSense system from Bumrungrad International Hospital, a leading hospital based in Thailand. The order, which includes systems and probes is expected to be delivered and installed by the end of the second quarter. If travel restrictions continue due to the ongoing COVID-19 pandemic, the IceCure team has developed a strategy to deliver the system and provide remote support, installation and training to enable rapid access of its safe and effective, non-surgical cryoablation treatment to patients in Thailand.

Bumrungrad International Hospital has been a global pioneer in providing world-class healthcare services and international patient support for nearly four decades. Located in Bangkok, Thailand, it is an

internationally accredited, multi-specialty hospital and one of the largest private hospitals in Southeast Asia, caring for over 1.1 million patients from more than 190 countries annually.

The Company's ProSense system is an effective liquid nitrogen (LN2) cryoablation solution, capable of destroying tumors safely, quickly and painlessly, without the need for surgery. Guided by CT or ultrasound, the probe is inserted into the tumor and liquid nitrogen generates sub-zero temperatures to turn the tumor into an ice ball. A freeze-thaw-freeze cycle destroys the targeted tissue immediately and leaves adjacent healthy tissue undamaged. The necrotic debris is eventually absorbed by the body.

Founded in 2006, Caesarea's [IceCure Medical](#) is a medical device company that develops and markets an advanced liquid-nitrogen-based cryoablation therapy for women's health and the interventional oncology market, with the primary focus areas being breast, kidney and lung cancer. Its technology is a safe, effective, non-invasive alternative to surgical tumor removal that is easily performed in a short procedure. The system has US FDA 510k and CE Mark clearance and is sold worldwide. (IceCure Medical 01.04)

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8.6. Neteera Launches Contactless Vital Signs Sensing System for COVID-19 Screening

Neteera has been working for the past five years on a tiny microsensor that senses vital signs such as heart and breathing rate at a distance and through clothing, without physical connection to the person monitored. In response to the current COVID-19 crisis, Neteera announced that it has accelerated the production schedule of its first-generation commercial platform, the Neteera Contactless Vitals series (NCV), in two distinct configurations:

- Neteera-1.0 Contactless Screening: Integrated with thermal camera, quickly detects elevated heart rate, breathing rate and temperature, established symptoms of COVID-19. Serves for first-line screening at hospitals, mass transportation, the workplace or any needed location.
- Neteera-1.2 Contactless Vitals Sensor: Continuous contactless monitoring of vital signs at the patient's location - whether in the hospital, outpatient care facility or home. Neteera's sensor raises the flag on those in need of urgent attention and reduces risk of COVID-19 transmission and healthcare associated infections (HAIs).

These platforms are at the focus of current collaboration by Neteera with governmental and corporate healthcare bodies in Israel and abroad.

Jerusalem's [Neteera](#), the global leader in remote and contactless vital signs monitoring solutions, is a Jerusalem-based tech company. Neteera's combination of a proprietary high-resolution radar on chip and patented software enables first-time continuous monitoring of human vital signs remotely and without contact. This increases patients' comfort level, provides valuable real-time physiological data and reduces healthcare associated infections (HAIs) by minimizing physical contact between patients and healthcare personnel. (Neteera Technologies 01.04)

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8.7. Vertical Field Changes Kosher Produce Consumption

Vertical Field announced its Star-K kosher certification, so that any company or community in cities around the world can benefit from growing and supplying its own fresh kosher greens locally and easily. Star-K recognizes that Vertical Field's pesticide-free, soil-based urban farming operations lend themselves to producing naturally kosher products, in its highest level. In fact, the greens are grown indoors in Vertical's Field's Urban farm, entirely free from exposure to insects, and since green agricultural produce is a naturally occurring plant that comes from the earth, they're almost fail-safe kosher after washing.

Vertical Field offers a never-been-done-before approach for supermarkets, restaurants, institutions and hotels to take complete ownership of the supply chain by growing their own vertical living walls of delicious,

naturally kosher greens — at the same time removing transportation expenses, reducing inventory costs, and ensuring year-round food supply regardless of climate or weather conditions. Vertical Field is committed to scaling the urban farm concept as well as exploring collaborations in agro-tech.

Ra'anana's [Vertical Field](#) develops vertical indoor farming and landscaping solutions for urban environments and smart cities. The company was established in 2006, motivated to restore nature in the urban lifestyle. Vertical Field specializes in indoor and outdoor vertical plant growth solutions that improve well-being and environmental conditions in cities. (Vertical Field 01.04)

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8.8. Neuraxpharm Joins Panaxia to Market Medical Cannabis Products in Europe

Düsseldorf, Germany's Neuraxpharm, a leading European specialty pharmaceutical company, together with Panaxia Labs Israel announced it is starting to market medical cannabis products, becoming the first European pharmaceutical company to include medical cannabis products in its portfolio. Neuraxpharm, which specializes in pharmaceutical products for the central nervous system (CNS), chose Panaxia Labs Israel, Israel's largest medical cannabis manufacturer, as its partner in a business collaboration for the manufacture, commercialization and distribution of advanced medical cannabis products in Germany, Europe's largest and fastest-growing medical cannabis market.

The breakthrough agreement signed by the two companies positions them as dominant players in the international cannabis market. The agreement is expected to cover more markets in the future. To date, collaborations between large pharmaceutical and medical cannabis companies were limited to research and development partnerships or local-scale distribution. The establishment of the business collaboration reflects Neuraxpharm's and Panaxia's strategy to become a European leader in the commercialization of medical cannabis products. Initial sales in Germany of the Panaxia / Neuraxpharm medical cannabis products are expected upon the receipt of the regulatory approval later in 2020.

Under the business collaboration, Panaxia will be responsible for manufacturing the products according to EU-GMP standards, as well as for the development and production of advanced new products, including tablets, suppositories and inhaled products. Panaxia will also be responsible for registering the products for commercialization according to the German regulatory requirements. Neuraxpharm will be responsible for branding, market penetration and distribution of the products to all certified pharmacies in Germany. The business collaboration includes a mutual option to consider expanding the collaboration to other EU countries.

Lod's [Panaxia Labs Israel](#) is a publically traded company at TASE. It is the largest Israeli manufacturer and home-delivery distributor of medical cannabis products and the first to have received the approval of the Israeli Ministry of Health for the manufacturing of medicinal cannabis based pharmaceuticals (under the IMC-GMP directive). The company manufactures over 30 hemp-based medicinal products and has accumulated a broad foundation of clinical experience based on tens of thousands of patients. (Neuraxpharm 01.04)

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8.9. Rochester Regional Deploys Datos for Remote Monitoring of Coronavirus Risks

Datos Health and Rochester-based consulting firm Strategic Interests announced the successful deployment of the Datos COVID-19 solution at Rochester Regional Health. The partnership is enabling Rochester Regional to more efficiently and safely monitor patients and healthcare workers exposed to or suffering from coronavirus, outside of the hospital setting.

The Datos Health solution is specifically designed to support hospitals across the world to alleviate the strain on healthcare systems by helping to keep suspected coronavirus patients, and those who are infected but do not require hospitalization, at home while still providing them with optimal care.

Ramat Gan's [Datos Health](#) is a provider of a robust, hospital-grade Remote Care platform representing a groundbreaking, fully automated approach to patient care and data handling. The Datos platform is a true game-changer in that it delivers on the promise and full potential of patient-generated healthcare data, by enabling automation of patient journeys at highly affordable cost. Datos utilizes advanced analytics and works agnostically across any treatment protocol, patient profile, data source, wearable and medical device, allowing automated detection, management and prediction of irregular symptoms. The platform enables rapid and seamless implementation of remote care within existing workflows, and ultimately improves effectiveness throughout care pathways. (Datos 31.03)

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8.10. RedHill Biopharma Completes Acquisition of Movantik from AstraZeneca

RedHill Biopharma has completed the recently announced acquisition of the global rights, excluding Europe, Canada and Israel, to Movantik (naloxegol), for the treatment of opioid-induced constipation (OIC) from AstraZeneca. Movantik is the first oral peripherally acting mu-opioid receptor antagonist (PAMORA) approved in the U.S. for OIC. It is recommended by the American Gastroenterological Association (AGA) guidelines and the National Comprehensive Cancer Network (NCCN) guidelines. OIC is the most prevalent and disabling adverse effect associated with opioid therapy, estimated to affect between 40-80% of the millions of patients taking chronic opioid therapy each year.

Tel Aviv's [RedHill Biopharma](#) is a specialty biopharmaceutical company focused on gastrointestinal diseases. RedHill promotes the gastrointestinal drugs, Talicia® for the treatment of Helicobacter pylori (H. pylori) infection in adults⁷, Aemcolo® for the treatment of travelers' diarrhea in adults⁸ and Movantik® for opioid-induced constipation (OIC) in adults. (RedHill 02.04)

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8.11. Panaxia Israel Completes Private Raising of NIS 23 Million

Panaxia Labs Israel announced the successful completion of a NIS 17 Million private placement of common stock and warrants to Israeli Institutional Investors: the provident funds, mutual funds, and portfolio management entities of Mor Investment House and Naked Capital Hedge Fund. In connection with the offering, the Company issued 6,319,703 shares of the Company's common stock at a purchase price per share of 2.69 ILS, and warrants to purchase an additional 5,055,762 shares of common stock at an exercise price of 4.00 ILS per share. In addition, the company has been granted a unilateral option from controlling shareholders and investors, for an additional investment of a minimum of NIS 6 million of which will be returned to common stock and warrants under the same identical terms.

Lod's [Panaxia Israel](#) is part of the pharmaceutical group of the Segal family, operating for over four decades, and manufacturing over 600 different pharmaceutical products, which it distributes in over 30 countries. Panaxia constitutes the Group's cannabis division. In addition, the sister-division of North America manufactures over 60 pharmaceutical products based on medical cannabis, including sublingual tablets, oral tablets, oils, inhalers, and more, intended to treat conditions such as post-traumatic stress, cancer, chronic pains, epilepsy, anorexia, burns, and many other medical conditions. (Panaxia Israel 02.04)

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8.12. Itamar Medical & BetterNight Offer Home Based Virtual-Care Solution for Sleep Apnea

Itamar Medical has entered into an agreement with San Diego's Sleep Data Diagnostics and its virtual-care platform BetterNight and Sleep Data Holdings, a leading provider of home-based positive airway pressure (PAP) services. This agreement is designed to radically simplify the process by which both sleep and non-sleep referring physicians, such as cardiologists, can refer their patients for sleep apnea testing with WatchPAT through Itamar Medical and BetterNight's platforms providing a full care pathway that includes

testing, medical consultation, continuous positive airway pressure (CPAP) therapy, billing and reimbursement channels. The agreement is expected to increase patient access to WatchPAT testing without the need to leave their homes and provide physicians, with a focus on cardiologists, and their patients, with information and interventions for managing sleep apnea and improving health outcomes.

Itamar Medical and BetterNight will collaborate to provide physicians and their patients a fully integrated and streamlined solution. Itamar Medical will provide patients suspected of having sleep apnea with a sleep apnea diagnostic study, facilitate a consultation with a board-certified physician for study interpretation and receipt of a prescription for a recommended therapy, if needed, enabled by its digital health platform. When elected by the managing physician, BetterNight will provide home-based CPAP therapy care using its advanced monitoring algorithm and remote respiratory therapy consultation and manage insurance coverage verification, preauthorization and billing.

Caesarea's [Itamar Medical](#) is a medical technology company focused on the development and commercialization of non-invasive medical devices and solutions to aid in the diagnosis of respiratory sleep disorders. Itamar Medical commercializes a digital healthcare platform to facilitate the continuum of care for effective sleep apnea management with a focus on the core sleep, cardiology and direct to consumer markets. (Itamar Medical 06.04)

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8.13. Nanox & Qure.ai Integrate AI-based Algorithms for Medical Imaging in Cloud

Nano-X Imaging (Nanox) announced its collaboration with Mumbai, India's Qure.ai, a leading healthcare AI startup, to integrate Qure.ai's diagnostics solution into Nanox's planned cloud-based software platform, the Nanox.CLOUD.

Nanox is working to expand the range of medical imaging services it intends to provide to improve the accessibility and affordability of early-detection services. The Nanox.CLOUD is designed to provide an end-to-end medical imaging service, including services such as image repository, radiologist matching, online and offline diagnostics review and annotation, connectivity to diagnostic assistive AI systems, billing and reporting. Qure.ai's solution detects critical abnormalities, such as bleeds, fractures, mass effect and midline shift, localizes them and quantifies their severity. Qure.ai's solutions are all CE certified, and its head CT product (qER) is the only solution in the industry to detect every critical brain abnormality on a head CT, including five types of intracranial hemorrhages, cranial fractures, infarcts, midline shift and mass effect (for tumor detection).

Neve Ilan's [Nanox](#) is developing a commercial-grade digital X-ray source designed to be used in real-world medical imaging applications. Nanox believes that its novel technology could significantly reduce the costs of medical imaging systems and plans to seek collaborations with world-leading healthcare organizations and companies to provide affordable, early detection imaging service for all. (Nanox 07.04)

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8.14. Nobio Secures Grant from IAA for Protective Measures Against COVID-19

Nobio announced receipt of a grant from the Israel Innovation Authority pursuant to a call issued in March 2020 for development and manufacture of innovative solutions to prevent, treat and otherwise assist in managing the COVID-19 outbreak. The \$205,000 grant will support the development and manufacture of personal protective equipment (PPE) and long-acting surface coating, incorporating Nobio's breakthrough antimicrobial technology. Nobio's technology is on the cutting edge of antimicrobial research, utilizing patented nanoparticles that transform common materials into antimicrobial, indefinitely. Nobio's Infinix products for dental restorations (fillings) received FDA clearance last year and commercial launch is planned for the second half of 2020.

The program funded by this grant focuses on two applications. The first is personal protection equipment (PPE), with priority for antiviral facemasks, given the primary infection route of the novel coronavirus, and nonwoven fabrics, which are commonly used for protective wear. The second application is surface coatings, with long-acting, universal protection, to prevent transmission of pathogenic microorganisms, such as the novel coronavirus. Both applications will incorporate Nobio's antimicrobial technology, which uniquely provides long-lasting, potent and broad-spectrum activity. In parallel, Nobio is working with market leading manufacturers for manufacturing the final products with the novel antimicrobial particles, which Nobio will manufacture and supply. Nobio has also begun to scale-up production capacity for its particles to meet the expected increase in demand.

Kadima's [Nobio](#) is a material sciences company that redefines the landscape of antimicrobial products and solutions with its novel nanoparticle technology. Nobio's Infinix product line for dental restorations received FDA clearance and will be commercially available this year. Nobio is working with global industry leaders in medical, dental, consumer and other industries, transforming their products into antimicrobial, indefinitely. (Nobio 09.04)

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8.15. Rapid Medical Completes Enrollment for the TIGER Clinical Study

Rapid Medical has completed enrollment in the TIGER (Treatment with Intent to Generate Reperfusion) study ahead of the planned schedule. This is a US based, multi-center study of the performance of TIGERTRIEVER, the company's novel thrombectomy device for the acute treatment of ischemic stroke. The TIGERTRIEVER is a fully-visible, controllable stentriever that is adjusted to fit the dimensions of a blocked blood vessel causing acute ischemic stroke.

TIGER is a multi-site, IDE study evaluating the safety and effectiveness of Rapid's TIGERTRIEVER for treatment of ischemic brain stroke. The study results will be used as part of the 510K submission of the device for FDA clearance. The study was completed ahead of schedule and took place at 16 of the leading stroke centers throughout the U.S and one center in Israel. The TIGERTRIEVER device has CE mark clearance and is commercially available in Europe; thousands of ischemic stroke thrombectomy procedures are performed with the device every year.

Yokneam's [Rapid Medical](#) is developing game-changing devices for endovascular treatments. Rapid Medical is the maker of TIGERTRIEVER and COMANECI, the first-ever adjustable remodeling mesh. TIGERTRIEVER and COMANECI are CE marked for use in Europe and COMANECI is also FDA approved. The TIGERTRIEVER is an investigational device and is not available for sale in the United States. (Rapid Medical 07.04)

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8.16. Tyto Care Raises \$50 Million to Expand Its Telehealth Offering Globally

Tyto Care has raised \$50 million in an oversubscribed round co-led by Insight Partners, Olive Tree Ventures and Qualcomm Ventures with participation from previous investors, bringing the company's total funding to over \$105 million. The additional funding comes as Tyto Care experiences surging demand with rapid global telehealth adoption, having witnessed 3X growth in sales in 2019 alone. The funding will allow Tyto Care to continue to expand commercialization throughout the U.S., Europe and Asia as well as to introduce new advanced product capabilities including AI and machine learning-based home diagnostics solutions and other patented technologies.

Tyto Care has experienced double-digit telehealth utilization, over 10 times higher than standard virtual care programs, which see less than 5% utilization on average. In the wake of COVID-19, hospitals and health organizations around the world are further expanding their use of Tyto Care's telehealth solution to remotely examine quarantined patients in hospitals and isolated patients at home.

Tyto Care's solution enables remote medical exams of the lungs, heart, throat and ears, among other exams and vitals, allowing healthcare organizations to protect providers and avoid exposure during the COVID-19 pandemic. It also enables families and the general population to receive care without entering medical facilities, preventing the spread of the virus and significantly reducing the increased burden on already overworked health organizations. To meet the skyrocketing demand, Tyto Care is currently expediting production to fulfill three times more devices than originally forecasted for the coming quarters.

Netanya's [Tyto Care](#) is transforming primary care by putting health in the hands of consumers. The telehealth company seamlessly connects people to clinicians to provide the best virtual home examination and diagnosis solutions. (Tyto Care 07.04)

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8.17. Nitiloop's NovaCross Earns FDA Clearance for Treating Chronic Total Occlusion

Pardes Hanna's [Nitiloop](#) has received a 510(k) clearance from the U.S. FDA for its NovaCross CTO Microcatheter. The NovaCross CTO Microcatheter device is intended to facilitate the intraluminal placement of conventional and steerable guidewires beyond stenotic lesions, including chronic total occlusions (CTO), prior to PTCA or stent intervention. It is also intended to be used in conjunction with a steerable guidewire to access discrete regions of the coronary and peripheral vasculature and for guidewire exchange.

The NovaCross CTO device is designed solely for ante grade approach. This enables even relatively new CTO practitioners at low-volume clinics to perform ante grade CTO procedures safely and successfully. It is based on a nitinol scaffold deployed by the physician preceding the CTO proximal cap and enables superior 0.014" guidewire support and centering.

Nitiloop addresses an un-met need in vascular procedures using a novel supporting element solution. Nitiloop's investors includes Accelmed Ventures, Access Medical Ventures, Arkin Holdings and Tal Capital. (Nitiloop 07.04)

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8.18. Datos Health Completes a \$7 Million Series A Financing Round

Datos Health announced completion of a \$7 million Series A round of financing. The investment brings Datos' total funding to \$9.2 million and will help the company expand its sales and marketing efforts, accelerate product development, increase talent acquisition and foster the company's rapid growth. The investment was led by Israeli venture fund Crescendo Venture Partners, which was impressed by the robustness and versatility of Datos' platform solution. They were followed by Industry Ventures, a leading US venture capital fund, which joined existing investors Vertex and Angular Ventures.

Ramat Gan's [Datos Health](#) is a provider of a robust, hospital-grade Remote Care platform representing a groundbreaking, fully automated approach to patient care and data handling. The Datos platform is a true game-changer in that it delivers on the promise and full potential of patient-generated healthcare data, by enabling automation of patient journeys at highly affordable cost. Datos utilizes advanced analytics and works agnostically across any treatment protocol, patient profile, data source, wearable and medical device, allowing automated detection, management and prediction of irregular symptoms. The platform enables rapid and seamless implementation of remote care within existing workflows and ultimately improves effectiveness throughout care pathways.

[Crescendo Venture Partners](#) is a Tel-Aviv based venture capital firm focusing on Israeli early stage software companies that is seeking to join ambitious entrepreneurs who want to build sustainable and profitable businesses based on solid foundations and with the potential of becoming category leaders of the future. (Datos 07.04)

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8.19. Oramed Patent in Canada Allowed for Oral Delivery of Proteins

Oramed Pharmaceuticals announced that the Canadian Patent Office has indicated its intent to grant the Company a patent for its invention titled "Methods and Compositions for Oral Administration of Proteins." Jerusalem's [Oramed Pharmaceuticals](#) is a platform technology pioneer in the field of oral delivery solutions for drugs currently delivered via injection. Established in 2006, Oramed has developed a novel Protein Oral Delivery (POD) technology. Oramed is seeking to revolutionize the treatment of diabetes through its proprietary lead candidate, ORMD-0801, which has the potential to be the first commercial oral insulin capsule for the treatment of diabetes. The Company has completed multiple Phase II clinical trials under an Investigational New Drug application with the U.S. FDA. In addition, Oramed is developing an oral GLP-1 (Glucagon-like peptide-1) analog capsule, ORMD-0901. (Oramed 07.04)

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8.20. Agritask & Royal Exchange Help Nigeria's Agriculture Digitization Quantum Leap

Agritask, in collaboration with Royal Exchange, General Insurance Company, Nigeria's premier insurance group in Nigeria, announced the launch of a unique joint initiative digitizing crop and livestock insurance with a social KPI to underwrite 1 million small holder farmers by 2025. The initiative involves a variety of stakeholders in the agricultural sector and beyond, including banks, cooperatives, ag-consultants, input distributors, ag-buyers etc.

Royal Exchange and Agritask embarked on a project to create a solid foundation for digital crop-insurance framework in Nigeria by utilizing Agritask's well-structured and accurate data infrastructure facility. The infrastructure is capable of combining diverse sources of data on one platform in an unprecedented resolution, including the mapping of farmers, their field locations, crop types, weather, soil and topography, among others. This foundations allow for accurate risk modeling and the design and pricing of suitable insurance policies.

Tel Aviv's [Agritask](#) is a holistic ag-operations platform, designed to enable fact-based decision making for agricultural businesses. To fulfill this vision, Agritask integrates a wide-array of agronomic technologies, tools and data sources into one single platform that analyzes the data and produces alerts, recommendations, and actionable insights. Data sources vary from sensors and machinery, aerial images, forecast data, and more. Agritask's platform is extensive and rich in its capabilities, yet built in a modular, flexible way that allows it to grow with customer needs, while facilitating a more advanced use of ag-technologies, making them accessible via one single platform. (Agritask 07.04)

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8.21. Cannabics Pharmaceuticals Develops Novel Formulation for Colon Cancer Treatment

Cannabics Pharmaceuticals has completed its preclinical development of a novel formulation containing cannabinoids which have demonstrated anti-tumor properties in studies held at the company's High Throughput Screening (HTS) research facility in Israel, which were focused on gastrointestinal cancers. The company plans to examine the clinical safety and efficacy of the novel formulation which contains high concentrations of the cannabinoids CBDV and CBGA in a proprietary formulation. These cannabinoids have demonstrated complex combinatorial anti-tumor effect and have no psychoactive effect which enables patients to be treated with high dosages without intoxication.

[Cannabics Pharmaceuticals](#) is a U.S. public company that is developing a platform that leverages novel drug-screening tools to create cannabinoid-based therapies for cancer that are more precise to a patient's profile. By developing tools to assess effectiveness on a personalized basis, Cannabics is helping to move cannabinoids into the future of cancer therapy. The Company's R&D is based in Israel, where it is licensed

by the Ministry of Health to conduct scientific and clinical research on cannabinoid formulations and cancer. (Cannabics Pharmaceuticals 13.04)

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8.22. Scopio Labs Receives CE Mark for X100 Microscope and Decision Support System

Scopio Labs has received CE mark certification for its X100 Full Field Peripheral Blood Smear (Full Field PBS) all-digital morphology analysis platform. As the first digital microscope to scan and analyze entire regions of interest from a slide in high resolution, Full Field PBS enables remote consultation and includes a computer-vision based decision support system, advancing manual microscopy into the digital age. To date, Scopio has demonstrated accurate results on hundreds of patient samples in Tel Aviv Sourasky Medical Center – Ichilov Hospital.

Accelerating the diagnostic process by scanning and digitizing large areas of the slide in high resolution, Scopio Labs helps facilitate efficient review of digital slides and uses its built-in AI tools to compile a detailed report that can also be remotely shared with experts. Today, a significant number of hematology diagnostic tests continue to be performed using manual microscopes, increasing potential for human error, creating silos of information and delaying life-sustaining decisions.

Tel Aviv Sourasky Medical Center (Ichilov) is the largest acute care facility in Israel, managing 1.8 million patient visits per year. The institution installed the Scopio platforms in 2019, and conducted hundreds of tests on patient samples, comparing the analysis quality to standard workflows.

Tel Aviv's [Scopio Labs](#), founded in 2015, develops breakthroughs in digital microscopy that help improve accuracy, efficiency and accessibility wherever the microscope plays a role in the diagnostic process. The Scopio microscope captures and digitizes full slide microscopy data. Using advanced computational photography techniques to reconstruct data, Scopio offers an automated digital microscopy scanning system with uniquely high resolution and quality images. The company creates end-to-end solutions that provide AI-based decision support systems and remote collaboration tools in hematology, pathology, research and veterinary medicine. (Scopio Labs 13.04)

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8.23. Enlivex Receives \$1.5 Million Grant to Fund COVID-19 and Sepsis Clinical Trials

Enlivex Therapeutics announced that the Israel Innovation Authority (IIA) selected the Company's planned COVID-19 and sepsis clinical programs to receive, in the aggregate, a non-dilutive grant of approximately \$1.5 million for the period through the first quarter of 2021. To date, Enlivex has received a total of approximately \$4.31 million in grants from the IIA for its historical clinical trials and development.

The IIA is an independent, publicly funded agency charged with fostering the development of industrial R&D within the State of Israel. It provides non-dilutive grants that become repayable only through royalties from future sales of products developed with the support of the IIA, and the repayment, if any, is limited to the original grant amount plus interest. Following the positive results of Enlivex's Phase Ib clinical trial in severe sepsis patients, Enlivex currently plans to initiate this year a Phase IIb/III trial of Allocetra for the treatment of organ dysfunction associated with sepsis, and, subject to regulatory approvals, initiate a clinical trial of Allocetra in COVID-19 patients.

Nes Ziona's [Enlivex](#) is a clinical stage immunotherapy company, developing an allogeneic drug pipeline for immune system rebalancing. Immune system rebalancing is critical for the treatment of life-threatening immune and inflammatory conditions which involve hyper-expression of cytokines (Cytokine Release Syndrome) and for which there are no approved treatments (unmet medical needs), as well as solid tumors immune-checkpoint rebalancing. (Enlivex Therapeutics 13.04)

9. ISRAEL PRODUCT & TECHNOLOGY NEWS

The Fortnightly may also be found at our Web site of: <http://www.atid-edi.com>

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9.1. FLIR Systems & Foresight to Develop & Distribute QuadSight Vision System

Foresight Autonomous Holdings announced the signing of an agreement with Oregon's FLIR Systems. FLIR is the world's largest and leading commercial company specializing in the design and production of thermal imaging cameras, components and imaging sensors. According to the agreement, the parties will establish a strategic cooperation plan for the development, marketing and distribution of Foresight's QuadSight vision system, combined with FLIR Systems' infrared cameras, to a wide range of prospective customers. As part of the agreement, Foresight will exclusively purchase its thermal cameras from FLIR for all systems to be commercialized worldwide.

Foresight will participate in the "Thermal by FLIR" program, a cooperative product development, marketing and product supply program that supports original equipment manufacturers (OEMs) and product innovators who use FLIR thermal imaging sensors in their products. As part of the program, Foresight will include the FLIR brand on its products. Current "Thermal by FLIR" partners include Panasonic, Bullitt Group, Blackview and other multinational companies.

Ness Ziona's [Foresight Autonomous Holdings](#), founded in 2015, is a technology company engaged in the design, development and commercialization of sensors systems for the automotive industry. Through the company's wholly owned subsidiaries, Foresight Automotive and Eye-Net Mobile, Foresight develops both "in-line-of-sight" vision systems and "beyond-line-of-sight" cellular-based applications. Foresight's vision sensor is a four-camera system based on 3D video analysis, advanced algorithms for image processing, and sensor fusion. (Foresight 01.04)

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9.2. Exaware Joins Disaggregated Open Router Initiative in the Telecom Infra Project

Exaware is expanding its involvement in the Telecom Infra Project (TIP) by joining the Disaggregated Open Router (DOR) sub-group. For more than a year, Exaware has taken an active role in TIP's Disaggregated Cell Site Gateways (DCSG) Project Group which has provided backhaul solutions for the cost-effective and scalable deployment of 5G networks. TIP's Open Optical & Packet Transport (OOPT) project group recently announced the launch of a new sub-group focused on developing Disaggregated Open Routers (DOR). Exaware will be joining this DOR initiative, which will be led jointly by KDDI and Vodafone.

TIP is a collaborative telecom community that is evolving the infrastructure that underpins global connectivity. TIP's mission is to accelerate the pace of innovation in next generation telecom networks, through the design, build, test and deployment of standards-based, open and disaggregated end-to-end solutions. As part of its TIP-related efforts, Exaware will leverage its robust and feature-rich ExaNOS operating system to address the core network, provider edge and peering applications, among others. ExaNOS works on all white-box equipment in the market using Broadcom DNX chipsets, notably on leading models from Edgecore Networks and Delta Networks. This approach gives Exaware customers the flexibility to choose the best solution according to their specific needs.

Netanya's [Exaware](#) is a leading provider of carrier-grade network operating systems for mobile and fixed telecom service providers. Founded in 2007 (as Compass Networks), Exaware has redefined routing software that is engineered specifically for carrier networks. With incredible scale potential and unprecedented rich features, Exaware's open NOS software is ported to low-cost white-box equipment. (Exaware 01.04)

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9.3. SolidRun Releases Family of Scalable HummingBoard Single Board Computers

SolidRun introduced the HummingBoard-M family of single board computers, including the media & IoT centric HummingBoard Pulse and skimmer HummingBoard Ripple, designed for the NXP i.MX8M & i.MX8M Mini based SOMs. The new family offers a highly versatile and scalable variety of configurations for simple development and easy implementation for a wide range of audio-visual, IoT, industrial automation, machine vision, AI and IoT applications.

The new family includes two SOMs (System on Modules) designed around NXPs powerful i.MX8 family of Arm processors. i.MX8M SOM offers high-end multimedia abilities including 4K@60 HDR, 20 audio channels, HDMI 2.0, and rich connectivity options. For even better power-efficiency and lower thermal envelope they designed i.MX8M Mini SOM – offering a well-rounded foundation boasting best power-performance in its class. A further configuration for the new i.MX8M Mini SOM is the addition of a Gyrfalcon Lightspeur® SPR2803 AI acceleration chip, turning it into a robust artificial intelligence building block for deployable AI inference at the edge.

Yokneam Elite's [SolidRun](#) is a global leading developer of embedded systems and network solutions, focused on a wide range of energy-efficient, powerful and flexible products. Their innovative compact embedded solutions are based on ARM and x86 architecture and offer a variety of platforms including SOMs (System-on-Module), SBCs (Single Board Computer) industrial switch routers, cutting-edge AI inference devices and state-of-the-art edge computing platforms. (SolidRun 01.04)

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9.4. UVeye is Providing Vehicle-Safety Inspections for Emergency Fleets

UVeye has developed contact-free, emergency-vehicle inspection systems equipped with thermal sensors that not only can detect critical vehicle-safety problems, but also can identify drivers and passengers with fevers through car windshields. UVeye is offering to equip health-related fleet operators with vehicle-inspection equipment on a not-for-profit basis during the current COVID-19 crisis. Ambulance and police fleets, as well as delivery services for food and medical equipment, all would be eligible for assistance.

Equipped with infrared thermal-imaging technology to detect body temperatures from a distance of several meters or more, UVeye systems could help health-care professionals rapidly identify individuals who might require additional COVID-19 testing or treatment. Vehicle-inspection systems equipped with thermal sensors, for example, could be installed at emergency drive-through lanes set up at hospitals, health care facilities and other community locations to test for potential coronavirus victims.

Tel Aviv's [UVeye](#) is known for the development of artificial-intelligence systems to identify threats at security checkpoints and border crossings, as well as systems to detect vehicle quality issues at dealerships and on new-car assembly lines. UVeye's technology initially was developed for the security industry to detect weapons, explosives and other threats. The company later saw an opportunity to use its expertise in machine-learning, artificial intelligence, algorithm development and camera technology to solve quality-related challenges within the automotive industry. (UVeye 31.03)

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9.5. Alcide's Free HIPAA Scan to Combat Surging Cyber Attacks During COVID-19 Crisis

Alcide announced that the Alcide Kubernetes Security Platform now supports HIPAA compliance scans. The new HIPAA compliance scanning capability adds to PCI and GDPR compliance scans that were announced by Alcide earlier this year, enabling DevOps and compliance managers to rapidly assess HIPAA regulatory compliance for free during a period where hackers are targeting vulnerabilities in software rushed into service to help combat COVID-19. The increase in hacking attempts has even prompted cybersecurity professionals to form a response group called Cyber Volunteers 19 (CV19). Alcide is contributing to security efforts that support healthcare organizations by offering a free HIPAA compliance scan for Kubernetes deployments using the Alcide Kubernetes Advisor.

Alcide now offers a free HIPAA security package for the healthcare community. Healthcare organizations can now use Alcide's security SaaS platform to secure development and production deployments of containerized applications on Kubernetes. From scanning vulnerabilities in Kubernetes clusters to detecting anomalous behavior and defining policies for firewalling microservices, the Alcide Kubernetes Security Platform is ready to help the healthcare community.

Tel Aviv's [Alcide](#) is a Kubernetes security leader empowering DevOps teams to drive seamless security guardrails to their CI/CD pipelines, and security teams to continuously secure and protect their growing Kubernetes deployments. Alcide provides a single Kubernetes-native AI-driven security platform for cross Kubernetes aspects: configuration risks, visibility across clusters, and run-time security events. (Alcide 02.04)

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9.6. AdMaven Launches New Security Features to Combat Ad Fraud

Tel Aviv's [AdMaven](#), one of the world's leading advertising networks, is unveiling its advanced security capabilities that will help its growing network of advertisers use the self-service platform with confidence and reassurance. According to research commissioned by the Association of National Advertisers (ANA), in the US alone, advertisers lost \$7.2 billion to bot fraud in 2019, up from \$6.3 billion in 2015. Security, fraud-detection, and traffic quality are at the heart of AdMaven. Over the last decade, they have built one of the biggest networks which offers the widest reach while maintaining the highest standards of quality and compliance. AdMaven's advertising network counts more than 10,000 website owners and serves more than 5,000 direct advertisers and 100,000 third party advertisers, all connected through over 200 media acquisition networks.

Improved security features for AdMaven's network include 24/7 data screening for real-time fraud detection: working with their proprietary fraud detection tool, as well as the best technology partners in the advertising security field enables them to screen all data in real-time. This provides an edge and the unique ability to detect and stop any problems as an when they happen. (AdMaven 02.04)

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9.7. Epsilon's 6T Military Lithium Batteries Outperform in Tests

Epsilon's line of Lithium 6T NATO batteries performed successfully in a series of bullet penetration tests, meeting US Army requirements and Israeli Defense Forces combat scenarios. In a series of tests performed from December 2019 to March 2020, Epsilon's 6T batteries achieved the following results:

A lithium-ion LFP 6T battery packed in a metal container did not disintegrate or explode, and did not release particles after being penetrated by a 7.62mm armor-piercing incendiary bullet. In addition, a scaled-down 6T LFP battery that was exposed to an external temperature of 500°C entered a thermal runaway. The battery did not disintegrate and did not release particles containing the thermal runaway effect.

Lithium-ion NCA and LFP 6T batteries installed in external fireproof cases within a vehicle battery compartment were not damaged and continued operating after an adjacent battery was penetrated by a 7.62mm armor-piercing incendiary bullet.

The tests were performed to address the operational requirements of the US army Ground Vehicle Systems Center (GVSC) MIL-PRF-32565B and the IDF demand for operational continuity of a combat vehicle when the battery compartment experiences a direct hit by enemy fire.

Bet Shemesh's [Epsilon](#) is a globally recognized developer and manufacturer of custom and standard batteries, chargers and mobile power management systems for the defense, medical, aerospace, industrial, IOT and marine markets. The company offers a wide variety of electro-chemistries, smart electronics and

sophisticated battery management systems (BMS). The company's products have won several international awards for their innovation and smart operational approach. (Epsilon 02.04)

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9.8. Jungo & Brodmann17 Collaborate to Bring Driver Monitoring for Aftermarket Devices

Brodmann17 and Jungo Connectivity announced their collaboration to bring joint driver monitoring and ADAS for fleet aftermarket devices. With road and driver analysis capabilities running concurrently on the camera SoC, this collaboration enables TSPs and smart camera manufacturers to rapidly deploy smart cameras to the market. These features will include forward collision detection, lane departure, driver distraction, driver drowsiness and more. The joint solution runs efficiently on common SoCs such as Qualcomm and Ambarella and is expected to increase road safety by reducing accidents and improving driving behavior.

Natanya's [Jungo](#) is a global leader of in-cabin sensing AI software, offering CoDriver, an advanced driver monitoring and in-cabin monitoring software. Additional products from Jungo include its infotainment multimedia and connectivity software. Jungo technologies are deployed in tens of millions of cars to-date.

Tel Aviv's [Brodmann17](#) was founded in 2016 when a team of deep-learning experts came together to accelerate the adoption of AI. By 2018 the technology was already implemented and installed in a commercially available product. Built from the ground up for the automotive market, Brodmann17's software delivers the world's most efficient perception for ADAS & Automated Driving to be used by leading tier-1 automotive suppliers for both integrated and aftermarket solutions. (Jungo 02.04)

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9.9. Wi-Charge Long-Range Wireless Power Solution Wins 2020 Edison Award

Wi-Charge announced that the company's R1 Wi-Charger with AirCord technology won Gold in the Consumer Electronics and Information Technology, Wireless Solutions category of the 2020 Edison Awards. The R1 Wi-Charger was chosen as a winner by a panel of over 3,000 leading business executives from around the world. The R1 Wi-Charger was recognized for being the world's first DIY plug-and-play wireless power solution for smart home devices - no configuration needed - simplifying consumers' lives by eliminating the need to use power cords or replace batteries. The R1 is similar in size to a Nest Thermostat and can be installed in seconds. It powers compatible smart home devices wirelessly from distances up to 30 feet, eliminating the need for constant battery changes and the hassle of running cables. Suitable for commercial, industrial and residential environments, the R1 allows manufacturers to bring new and innovative products to market and address pressing customer concerns.

Rehovot's [Wi-Charge](#) is the long-range wireless power company, founded with the goal of enabling automatic charging of phones and other smart devices. Their patented infrared wireless power technology can safely and efficiently deliver several watts of power to client devices at room-sized distances. It gives end-users the freedom they crave and product designers the power they need to usher in the next generation of mobile smart devices. Advancing beyond batteries and power cords, Wi-Charge delivers the future of power. (Wi-Charge 02.04)

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9.10. Orbit Communication Systems Announces Follow-on Ground Station Order

Orbit Communication Systems announced a new order for a multi-band Gaia 5.5 m Gaia ground station. The high-gain dual S/X-band system will be installed in in 2020, and brings additional capabilities to the existing Gaia-based ground network for a leading satellite imagery service provider.

Combining years of experience and an extensive installed base with strong partnerships in the New Space sector, Orbit took a step forward from traditional and complex 'earth stations' to develop the Gaia family of high-performance and cost-effective compact ground stations. An extensive installed base of highly reliable Gaia terminals now serve the rapidly growing Earth Observation and MEO/LEO constellation segments, as well as satellite service providers and teleports. The new 5.5m multi-band ground station shares the same modular architecture, intuitive tools, and ease of operation as the popular 2.4m, 3.7m, and 4.5m Gaia series. Gaia terminals can be configured for L-band through the full Ka-band, as well as for multi band operation, with a choice of proven RF power units. The lightweight, small footprint design allows installation on a broad range of locations and structures, while a robust protective radome ensures continuous operation in even the most severe environments.

Netanya's [Orbit Communication Systems](#) is a global leader in satellite tracking and airborne communications solutions, helping to expand and redefine how we connect. Orbit systems are on cruise ships and navy vessels, airliners and jet fighters, ground stations and offshore platforms. They deliver innovative, cost-effective, and highly reliable solutions to commercial operators, major navies and air forces, space agencies and emerging New Space companies. (Orbit 02.04)

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9.11. Sixgill's Deep Solution Integrates with Palo Alto Networks for Incident Response

Sixgill announced that its Deep and Dark Web Threat Intelligence Solution, an automated and contextual cyber threat intelligence solution, will integrate with Palo Alto Networks Cortex XSOAR, the industry's first extended security, orchestration, automation and response platform with native threat intel management. This empowers security leaders with instant capabilities against threats across their entire enterprise. Through this integration, Sixgill and Cortex XSOAR are enabling customers to scale and accelerate their incident response by combining deep and dark web intelligence with automation, which allows them to better anticipate attacks and proactively protect themselves. This is the first third-party integration utilizing Cortex XSOAR's threat intel management capability.

With the recent introduction of Sixgill's Darkfeed, Cortex XSOAR customers can also integrate and customize an automated feed of indicators of compromise (IOCs). Using Darkfeed, security teams receive early warnings of new malware threats, hunt for malicious IOCs on corporate networks, better understand trends in the criminal underground and block items that threaten their organizations. Sixgill uses automation and machine learning to provide the broadest coverage of proprietary deep, dark and surface web intelligence to help mitigate cyber risk more effectively and deliver contextual, actionable insights to protect organizations.

Tel Aviv's [Sixgill](#) is a fully automated cyber threat intelligence solution suite that helps organizations protect their critical assets, reduce fraud and data breaches, protect their brand and ultimately minimize attack surface. The platform empowers security teams with contextual and actionable insights as well as the ability to conduct real-time investigations. Rich data feeds such as Darkfeed harness Sixgill's unmatched intelligence collection capabilities and delivers real-time intel into organizations' existing security systems to help proactively block threats. (Sixgill 07.04)

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9.12. MinerEye Launches Data Breach Incident Response & Investigation Service

MinerEye launched a new Intelligent Data Breach Incident Response and Investigation Service. With this new MinerEye Service, an organization can accelerate and improve network-wide investigations to map compromised data and significantly reduce the time it takes to provide accurate breach notification. It also allows them stay ahead of future incident related risks before they strike. MinerEye's Data Breach Incident Response and Investigation Service enables organizations to meet breach notification requirements mandated by GDPR, CCPA, NYPA, HIPAA, PIPEDA and others.

Hod HaSharon's [MinerEye](#) enables organizations to overcome the information governance and protection challenge. It automatically scans, indexes, analyzes, virtually labels and categorizes every piece of unstructured and dark data contained in the organization's data repositories. With proprietary Interpretive AI™, machine learning, and computer vision, the solution locates relevant files out of the billions that are stored, accurately evaluates them, qualifies them by significance and purpose, and automatically sends alerts with next best action recommendations in cases of conflicts, duplications, or potential violations. This way, data protection is profoundly enhanced while risk and operational costs are reduced. (MinerEye 07.04)

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9.13. Cubed Mobile Transforms One Mobile Device into Two

Cubed Mobile's technology transforms one mobile device into two, encapsulating an entire business smartphone in a super-app. The platform simplifies the corporate mobile experience and improves the work-life-privacy balance by providing a self-contained, centrally managed virtual smartphone that can be installed in any device, eliminating the need for a second device or SIM. Cubed Mobile supports a multitude of scenarios, easing the ability to serve international customers, enhancing customer services with more coordinated support procedures and rolling support calls, and strengthens collaboration.

Added to any mobile device, it ensures complete protection with clear differentiation between the personal and professional, with different apps, phone numbers, contacts, and settings and can be individually customized within a corporate-approved "app library." The patented solution reduces security and IT costs with the ability to remotely wipe, backup, and restore entire workspaces, apps, and settings and migrate them from one device to another with a click; this ensures company data stays within the organization, even if devices are lost or stolen and upon employee separation.

Kibbutz Einat's [Cubed Mobile](#) combines the best of unified communications with the highest levels of mobile and endpoint device management in a single solution. SMBs and SMEs benefit from a convenient system that delivers protection, communication, and productivity in a single package. Customers include everything from small sales organizations to large-scale enterprises. Recently named a Gartner Cool Vendor, Cubed Mobile helps communications service providers, MSPs, VARs and other resellers accelerate their clients' workforce digital transformation. (Cubed Mobile 07.04)

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9.14. Regulus Cyber & HARMAN Offers Software-Based GPS Cybersecurity Solutions

Regulus Cyber announced a collaboration with Connecticut's HARMAN for a breakthrough software-based cybersecurity solution designed to protect GPS, against potential threats. The solution will be part of HARMAN SHIELD, the company's robust offering for risk management to vehicle manufacturers and mobility companies.

The Regulus Pyramid GNSS is a software solution that uses machine learning to detect spoofing and defend any GNSS receiver, device, or chipset against it — ensuring the security and reliability that are essential to safe and accurate navigation. GPS spoofing attacks are becoming more common and are often very difficult to detect and protect against. Pyramid GNSS uses a combination of patented algorithms, developed over years of spoofing experiments to protect against attacks at the firmware, operating system, or application level. This deal is further proof of the market demand for resilient navigation and positioning at a time when GPS hacking is a growing concern.

Founded in 2016, Haifa's [Regulus](#) is backed by SPDG Ventures, btov Partners, Sierra Ventures, Canaan Partners Israel, the Technion DRIVE Accelerator and F2 Capital. For years, GNSS security has been hard-coded into hardware - at the chip or receiver level. With the rise of software-defined radios and open-source GNSS attack software, these outdated mechanisms have become ineffective and obsolete, failing to protect against the fast pace of new dangerous spoofing attacks. Regulus Cyber is disrupting the GNSS

market with the first-ever software-only, connected and system-agnostic solution to detect, protect and mitigate smart spoofing attacks. (Regulus Cyber 06.04)

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9.15. Illinois Mutual Life Insurance Chooses Sapiens for Its Life Digital Transformation Project

Sapiens International Corporation announced that Illinois Mutual Life Insurance (Illinois Mutual), a company that services 47 U.S. states and serves over 8,600 independent agents, chose multiple Sapiens' life solutions as part of its digital transformation project. The insurer aims to deliver seamless illustration, eApplication, straight-through underwriting and intuitive enrollment functionality to their agents and customers. Illinois Mutual selected Sapiens IllustrationPro for Life & Annuities, Sapiens ApplicationPro for Life & Annuities, Sapiens UnderwritingPro for Life & Annuities and Sapiens EnrollmentPro for Life & Annuities after a thorough market evaluation.

The move by Illinois Mutual is aimed to enhance the overall client and agent experience within its life, disability income and worksite insurance solutions. The company sought to achieve this objective by enhancing its illustration capabilities, improving eApplication functionality and modernizing the underwriting system. The Sapiens Platform for Life & Annuities offers excellence in the administration of the insurance business and creates greater efficiency via legacy consolidation. The platform is comprised of a core suite (including illustration, underwriting and eApplication), advanced analytics and a full digital suite.

Holon's [Sapiens International Corporation](#) empowers insurers to succeed in an evolving industry. The company offers digital software platforms, solutions and services for the property and casualty, life, pension and annuity, reinsurance, financial and compliance, workers' compensation and financial markets. With more than 35 years of experience delivering to over 500 organizations globally, Sapiens has a proven ability to satisfy customers' core, data and digital requirements. (Sapiens 06.04)

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9.16. Alcide Releases sKan - A Tool to Scan Kubernetes Deployment Files

Alcide announced the release of sKan, an open and free command line tool that brings Alcide Security Platform to the hands of developers, DevOps and Kubernetes application builders. sKan enables developers to scan Kubernetes configuration and deployment files as part of their application development as well as CI pipelines. Developers can download the tool here and start scanning their Kubernetes deployment files, Helm charts or Kustomized resources.

Alcide sKan, powered by technology behind Alcide Advisor and Open Policy Agent (OPA), is a software translation of DevSecOps culture and shifting security left to the hands of developers building Kubernetes-based applications. Alcide sKan complements Kubernetes application builders' choice of deployment framework tooling, whether this is via Helm charts, Kustomized resources or plain Kubernetes resource files (Yaml/Json). While scanning source code for security vulnerabilities is a common practice, possible configuration errors in Kubernetes environments is often overlooked and vulnerabilities are often unwittingly introduced to production.

Tel Aviv's [Alcide](#) is a Kubernetes security leader empowering DevOps teams to drive seamless security guardrails to their CI/CD pipelines, and security teams to continuously secure and protect their growing Kubernetes deployments. Alcide provides a single Kubernetes-native AI-driven security platform for cross Kubernetes aspects: configuration risks, visibility across clusters, and run-time security events. (Alcide 09.04)

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9.17. Sky Sapience HoverMast - Lite – the Next Generation of Tethered UAV Platform

Sky Sapience introduces its newest generation tethered UAV platform, HoverMast- Lite (HM-L1 and HM-L3). Designed to function as smaller, light-weight versions of their flagship HoverMast platform, the HM-L systems will be used in tandem with small robotic vehicles participating in the RCV/SMET programs. The HM-L systems maintain the impressive capabilities of the original HoverMast product line; such as 100m hovering, 24/7/365, autonomous, on the move, bad weather operations, fiber optic communication, cyber immunity and operation in GPS denied environments, while also meeting the size, weight and electric power requirements of the RCV and SMET programs.

The unique design concept behind the HoverMast-Lite enables the tethered drone and the sensors operation without limiting the vehicle's continuous work. Moreover, the HM-L does not occupy the vehicle's bed, allowing it to remain available for additional equipment and sensors. The HM-L concept is internationally patent protected. The HoverMast-Lite has the ability to incorporate most payloads weighing up to 6.0 kg; including CCD/IR cameras, radars, lasers, cellular and mesh communication devices, hyper spectral sensors and cyber systems. The HM-Lite and its payload are both easily and intuitively controlled and monitored from a single ruggedized Human- Machine Interface (UHMI.)

Yokneam's [Sky Sapience](#), founded in 2010, leads the revolution of tethered hovering technology providing unlimited surveillance and communications for the defense and enterprise markets. Its team comprises experts in the fields of mechanical engineering, aeronautics, robotics, software programming, electronics, and business management. (Sky Sapience 13.04)

10. ISRAEL ECONOMIC STATISTICS

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10.1. Israel's Inflation Rate Rises by 0.4% in March

Israel's Consumer Price Index (CPI) rose 0.4% in March, the Central Bureau of Statistics announced on 14 April. In the first quarter of 2020, the CPI has fallen 0.1% and over the past 12 months, the CPI has remained unchanged. Housing prices continue to climb and have risen 3.9% over the past 12 months. In March, there were notable rises in prices of clothing and footwear (3.2%), fruit and vegetables (1.8%), housing related costs (0.9%) and food (0.6%). There was a notable fall in prices of fresh vegetables (1.9%).

Housing prices (which do not form part of the CPI) have continued to rise. In comparison with transaction prices in the period December-January 2019/2020, prices in January to February 2020 were 0.6% higher, and they were 3.9% higher than in the corresponding period twelve months earlier (January-February 2019). (CBS 14.04)

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10.2. Israeli Startups Raised Over \$650 Million in March

[Globes](#) reported that despite the global coronavirus pandemic economic crisis, Israeli startups raised over \$650 million in March alone, according to press releases issued by companies that have completed financing rounds. The figure may be more as some companies prefer to remain in stealth and not to publicize the investments they have received.

After raising a record \$8.3 billion in 2019, according to IVC-ZAG, which easily surpassed the record \$6.4 billion raised by Israeli tech companies in 2018, and \$5.24 billion in 2017, 2020 has begun strongly, although it is difficult to see 2020 being yet another record year with the expected recession following the virus crisis. Nevertheless, Israeli tech companies have raised over \$2.15 billion in the first three months of the year, compared with \$1.45 billion in the corresponding period of 2019. Financing rounds in March were led by smart travel ridesharing company Via, which raised \$400 million. AI chipmaker Hailo raised \$60 million and cybersecurity company Axonius raised \$58 million. (Globes 01.04)

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10.3. Israel's Budget Deficit Widens to 4%

Israel's Ministry of Finance announced on 8 April that the budget deficit for the 12 months ending in March has widened to 4% from 3.1% the previous month. The rise reflects the growth in public spending and fall in tax revenues over the past month as the coronavirus crisis began to have its effect. The Ministry of Finance added that in the coming months, the sharp rise in the budget deficit will continue as a result of the crisis. The latest figure also reflects a new methodology in calculating government expenditure to include debt repayment.

The direction of the budget deficit is reflected in the fact that for March, the deficit was NIS 15.9 billion, compared with NIS 3.6 billion in March 2019. Tax revenues were down 17.6% in March compared with March 2019, and government revenues were down 8.1% in Q1/20 compared with Q1/19. The main decline in revenues was due to the National Insurance Institute diversion of funds from the state coffers through the purchase of government bonds for use as unemployment payments. Thus the National Insurance Institute has not passed any money onto the government this year compared with NIS 6.2 billion last year. Tax collection fell 7% in the first quarter. (MoF 08.04)

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10.4. Israel's Gasoline Taxed at World's Highest Rate

Israeli drivers enjoyed a marked windfall on 1 April when the maximum price of government price controlled 95 octane gasoline at self-service pumps in Israel fell by NIS 1.03 to NIS 4.89 per liter. However, that means that the rate of tax on gasoline (excise + VAT) has now risen to an historic high of 78% of the price of a liter of gasoline, putting Israel in first place, not only in the OECD, but in the world, in terms of tax rates for gasoline. In addition, the relative price of gasoline, adjusted to the dollar rate, puts Israel in the top ten worldwide with a price of \$1.35 per liter.

The distortion stems from the price of gasoline under government supervision, which has a fixed rate of NIS 3.074 excise per liter, regardless of the actual price of a barrel of oil worldwide and refinery costs. The price of gasoline fell dramatically by 63% last month to just NIS 0.55 per liter following the collapse of oil prices on world markets due to the coronavirus pandemic. But the price per liter of excise tax remained constant. (Globes 05.04)

11. IN DEPTH

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11.1. ISRAEL: Bank of Israel Research Department Staff Forecast for April 2020

Abstract

The [Bank of Israel Research Department](#) released its staff forecast for the Israeli economy as of April 2020. This forecast was compiled in the midst of the coronavirus crisis and against the background of the steps being taken worldwide to prevent the further spread of the virus. This period has an exceptional level of uncertainty—regarding the depth of the crisis, its length, and its ramifications for the medium and long terms.

According to the staff forecast, gross domestic product (GDP) is projected to contract by 5.3% in 2020, and to grow by 8.7% in 2021. The inflation rate in 2020 is expected to be negative, at -0.8%, and to be 0.9% in 2021. According to the forecast, the Bank of Israel interest rate in the end of 2020 is expected to be in the range of 0.0 – 0.1%, and at the end of 2021, it is expected to be in the range of 0.00 - 0.25%.

Three of the working assumptions that were used in the compilation of the forecast are of particular note. The first is that the steps taken will achieve their goal in limiting the scope of morbidity and mortality.

Second, that additional limitations will not be imposed beyond those in effect as of the morning of 5 April, 2020. Third, that the main part of the limitations restricting economic activity will be lifted, gradually, by the end of June. Therefore, after a marked contraction of activity in the first half of 2020, which will also be accompanied by an increase in the unemployment rate, beginning from the second half of 2020 we are assuming a gradual return to regular activity and to a path of growth.

Forecast

The Bank of Israel Research Department compiles a staff forecast of macroeconomic developments on a quarterly basis. The staff forecast is based on several models, various data sources, and assessments based on economists' judgment. The Bank's DSGE (Dynamic Stochastic General Equilibrium) model developed in the Research Department - a structural model based on microeconomic foundations - plays a primary role in formulating the macroeconomic forecast. The model provides a framework for analyzing the forces that have an effect on the economy, and allows information from various sources to be combined into a macroeconomic forecast of real and nominal variables, with an internally consistent "economic story".

In the current quarter, special emphasis was placed on an analysis by industry in order to understand the economic impacts of the crisis and the policy steps on the economy. In particular, the forecast is based on assessments with regard to the shutdown of industries as a result of the government's steps to combat the spread of the coronavirus. In addition, the forecast is based on the assumption that the steps taken will be temporary, which in actuality will be based on the specifics of the contagion and the load placed on hospital infrastructures in Israel.

a. The Global Environment

Our assessments of the expected developments in the global environment were formulated through our assessments based on previous crises and on the following of projections being compiled by international institutions and foreign investment houses. With the outbreak of the crisis, there was a marked decline in projections regarding GDP growth, inflation and interest rates in advanced economies in 2020, with a very marked increase in uncertainty surrounding those forecasts and assessments. In our assessment, GDP in advanced economies will contract by 6 %this year, but in 2021 it is expected to grow by about 5%. In particular, we assume that imports by advanced economies in 2020 will contract by approximately 10%, and in 2021 they are expected to return to a path of growth and to expand by approximately 8%. (In the previous forecast, before the outbreak of the crisis, we assumed an expansion of 2.0–2.5% in each of the years.) After central banks reduced interest rates sharply, some of them in the framework of decisions that were not regularly scheduled, in all the major economies the interest rates today are at a near-zero level and we assume that they will not be raised before the end of 2021. The price of oil declined sharply against the background of the crisis - the average price of a barrel of Brent crude oil in the first quarter of 2020 was \$51, and during the end of the quarter it was actually lower than \$25.

b. Real Activity in Israel

The decisions reached in Israel and abroad to halt the spread of the coronavirus have a significant impact on GDP and employment. The impact on the various industries in the economy has not been uniform, with some experiencing a complete halt of activity. At the aggregate level, GDP is expected to contract by 5.3% in 2020. This is, as noted, assuming that the main part of the restrictions intended to prevent the further spread of the virus will be lifted gradually by the end of June, so that in the second half of the year the economy will return to activity without limitations on movement or employment, and will switch to a path of growth.

However, some of the economic ramifications are of a longer term nature. Therefore, even after limitations are removed, the recovery - even if relatively rapid - is expected to be gradual. Accordingly, unemployment in the second half of the year is expected to be 8% (among the prime working ages), and only at the end of 2021 is the labor market expected to be characterized by a scope of employment close to that which characterized it prior to the crisis.

In order to reduce the length, and magnitude, of the economic crisis, particularly expansionary fiscal policy is expected, both in Israel and abroad. Alongside marked growth of government expenditures, a notable decline in tax revenues this year is expected as well, within the framework of the action of the automatic stabilizers. The combination of these two is expected to be reflected in an exceptional deficit, of about 11% of GDP in 2020. In addition, as noted, a contraction of 5.3% in GDP itself is expected, so that the debt to GDP ratio is expected to grow to about 75% at the end of the year.

c. Inflation and Interest Rate Estimates

According to the staff forecast, the inflation rate in the next four quarters is expected to be -0.5%, but during the course of 2021 it is expected to total 0.9%. Even before the start of the crisis, the expected inflation path for the coming months was low. Now, due to the crisis, inflation is expected to be even lower - as a result of the sharp decline in the price of oil and other commodities, the increase in unemployment and its impact on wages, and as a result of possible moderation in the pace of growth in rents, at least for some time. However, as of now, there does not appear to be a significant shortage of raw materials or critical goods, so that there does not appear to be a notable contribution to inflation from this source. The forecast also reflects the recent depreciation in the shekel and its contribution to inflation, and assumes stability in the exchange rate going forward from now. Accordingly, the inflation forecast was markedly lowered compared to the previous forecast (which was 1.0% for 2020). Against the background of the expected switch to a trend of recovery in the third quarter of the current year, an inflation rate of 0.9% is expected for 2021 (compared with 1.4% in the previous forecast).

We assess that the Bank of Israel interest rate in the end of 2020 will be in the 0.0–0.1% range. Recall that alongside the interest rate, the Bank of Israel operates additional policy tools, in order to provide a response to the economy's liquidity needs and to moderate the increase of yields in the credit market, both in domestic and foreign currency.

d. Main Risks to the Forecast

The coming period is characterized by particularly high uncertainty. This is because the global and domestic crisis, against the background of the coronavirus pandemic, is unprecedented in its scope and characteristics. Therefore, it is difficult to assess the extent and magnitude of its economic impacts. A deferral of a month in the process of removing the limitations, compared with the assumption at the basis of the above forecast, and a contraction of 15% in world trade, will lead in our assessment to a sharper contraction of GDP in 2020, of about 8.8%, and will add about 2% to the average unemployment rate in 2020.

In addition, in the period of time that will pass until the beginning of the term of the new government, there will be uncertainty regarding the policy steps that will be taken in various areas (with and without connection to the coronavirus crisis) and with regard to their impacts on growth, employment, inflation and the interest rate.(BoI 06.04)

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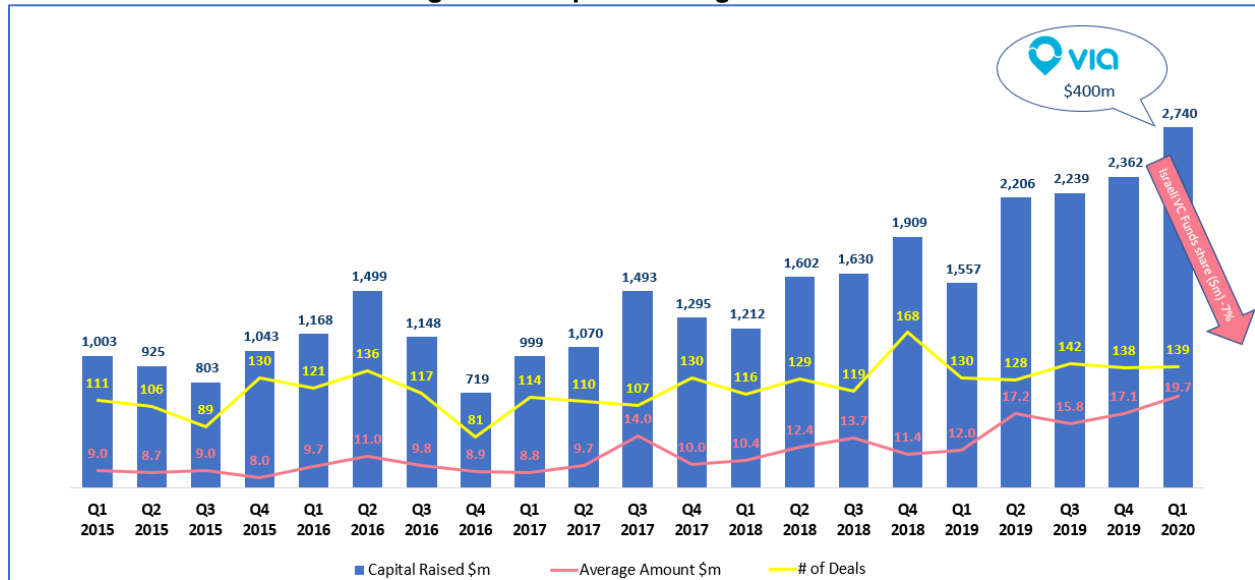
11.2. ISRAEL: Summary of Israeli High-Tech Companies Capital Raising – Q1/20

IVC and ZAG (S&W Zysman, Aharoni, Gayer & Co.) reported on 5 April that in the course of Q1/20, Israeli high-tech companies raised \$2.74 billion in 139 deals. The figures registered this quarter peaked in comparison to previous quarters: 76% up in capital volume from Q1/19. Excluding the Via Transportation deal (\$400 million), Q1/20 capital raising totaled \$2.34 billion in 138 deals compared with \$2.36 billion in 138 deals in Q4/19.

Guy Holtzman, CEO of IVC Research Center, notes: "The figures presented in Q1/20 continue the trends from 2019, and do not point on a similar trend in 2020. The strength of Israeli high-tech will be tested in 2020. This time around, it is a completely different industry from the previous crisis, and even though many

companies will suffer, IVC believes that overall, the Israeli tech industry will emerge strengthened from this challenge. In the long run, the crisis will create an opportunity for international corporations, Corporate VCs and VC funds to increase their involvement in Israeli investments and acquisitions."

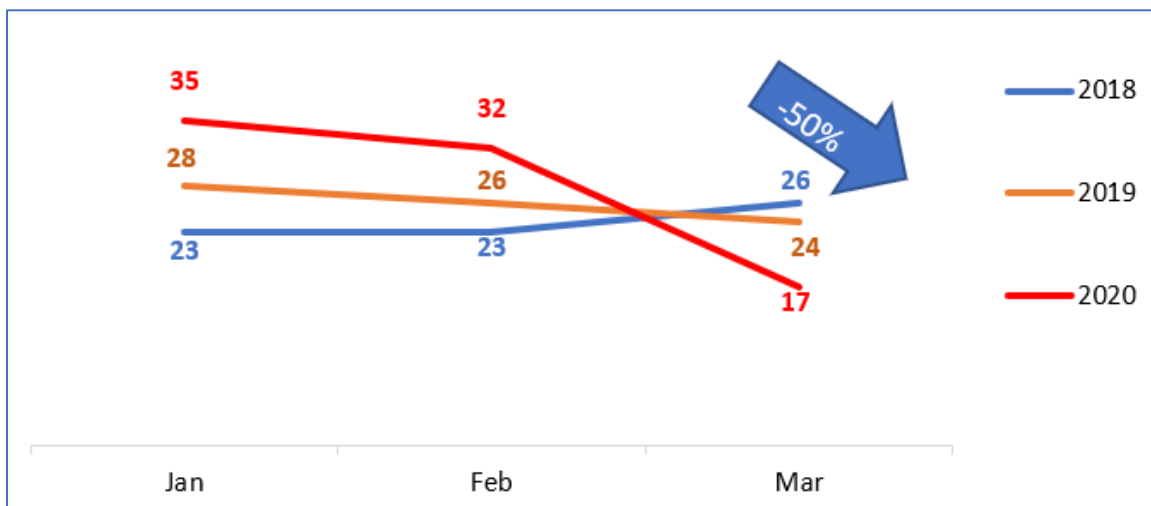
Israeli High-Tech Capital Raising Q1/2015 – Q1/20



Venture Capital Funding

Following the growth trend of 2019, capital raised in VC-backed deals peaked in Q1/20 – climbing to \$2.43 billion – 89% share of total dollar volume – an all-time record. The number of VC-backed deals stood at 84 and captured a 60% share of total transactions in this quarter, in line with the quarterly averages of past years. The impact of Corona virus led to a substantial decrease in deal making throughout March of this year – only 17 VC-backed deals were registered, down almost 50% from the numbers observed in the other months of this year.

Number of Israeli High-Tech VC-Backed Deals – by Month Q1/2018-Q1/20



Israeli VC funds' share continued to decline, reaching all-time low of a mere 7% of total capital raised in Q1/20, with \$201 million. This was a decrease of 28% from the previous quarter (\$279 million) and the corresponding quarter from last year (\$278 million).

Adv. Shmulik Zysman, Founding Partner of ZAG-S&W (Zysman, Aharoni, Gayer & Co. (ZAG-S&W), international law firm & head of the firm's High-Tech department, said: "After 2019 peaked at impressive highs, came the first quarter of 2020 and within it – the month of March. The first quarter of 2020 marked a record quarter in the past 6 years in terms of fundraising, thanks to only two and a half months! In my day, kids used to say, 'They broke the rules and stopped playing.' Looking at the next quarters, this record does not mean much.

Two weeks into the month of March, the market stopped all at once. Most investors at various stages of negotiations simply backed out. Indeed, when it rains, everyone gets wet – even the best. It is clear by now that the high-tech industry, along with others, will not manage to avoid the effects of the Corona virus.

Case in point, the total amount of funds raised in the Life Sciences domain over this quarter is 200% higher than the average fundraising in the sector recorded over the past six years. However, we are experiencing a dramatic halt in this area, given the fact that all the resources of the world's public medical systems are being invested in coping with the virus.

It is already clear that the aggregate amount of transactions in the second quarter of 2020 will be significantly lower than what we have become accustomed to in the past few years. The recovery will not be easy; the psychological blowback of the Corona virus crisis is entwined with investment psychology and the herd behavior principle; a repetitive phenomenon in every crisis.

A reason for optimism is China's recovery. On the other hand, the US is moving toward the peak of the pandemic, and the assessment is that it will have a short-term impact on Israel's high-tech sector.

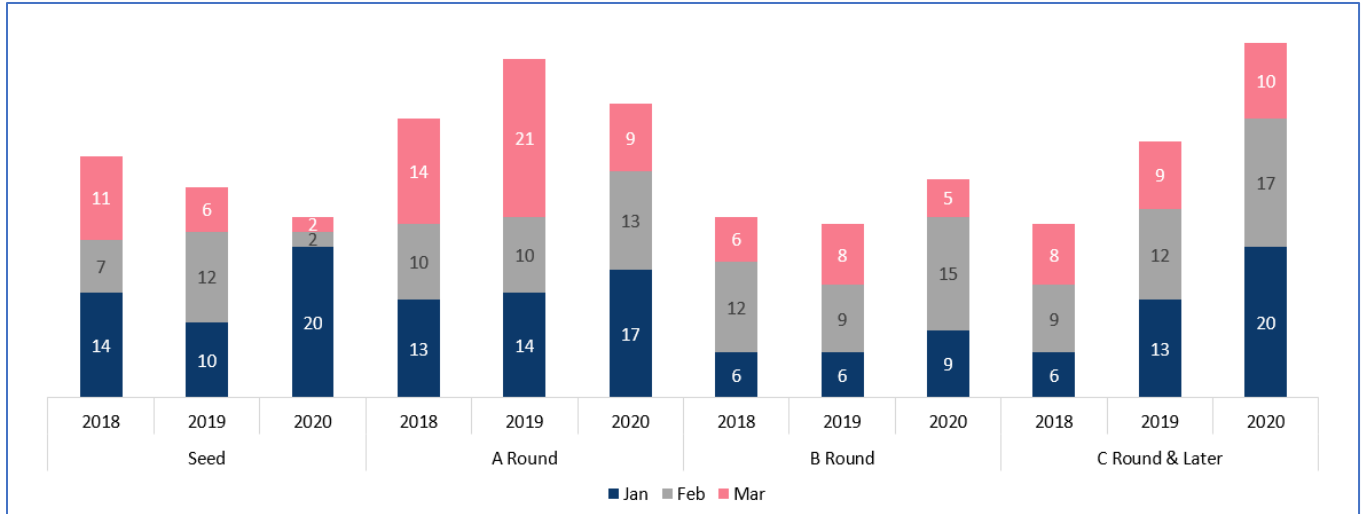
Nevertheless, we are confident that the Israeli high-tech industry will return to its glory; the only question is how fast. This is unlikely to happen in the upcoming quarter, yet first signs will appear in the third quarter. Certainly, we will warmly embrace every positive surprise."

Capital Raising by Rounds

In Q1/20, Seed financing rounds showed a drastic decrease to 24 deals, compared with the quarterly averages of 32 seed rounds in the years since 2013. With the advent of the crisis further into the first quarter, capital raising in Seed rounds has almost completely ceased, with a minimal two deals in both February and March.

In general, the number of Early rounds (Seed + A rounds) in Q1/20 has shrunk to 63 deals, a decrease of 17% from 2019 averages.

Number of Israeli High-Tech Deals by Financing Rounds – by Month Q1/18 - Q1/20

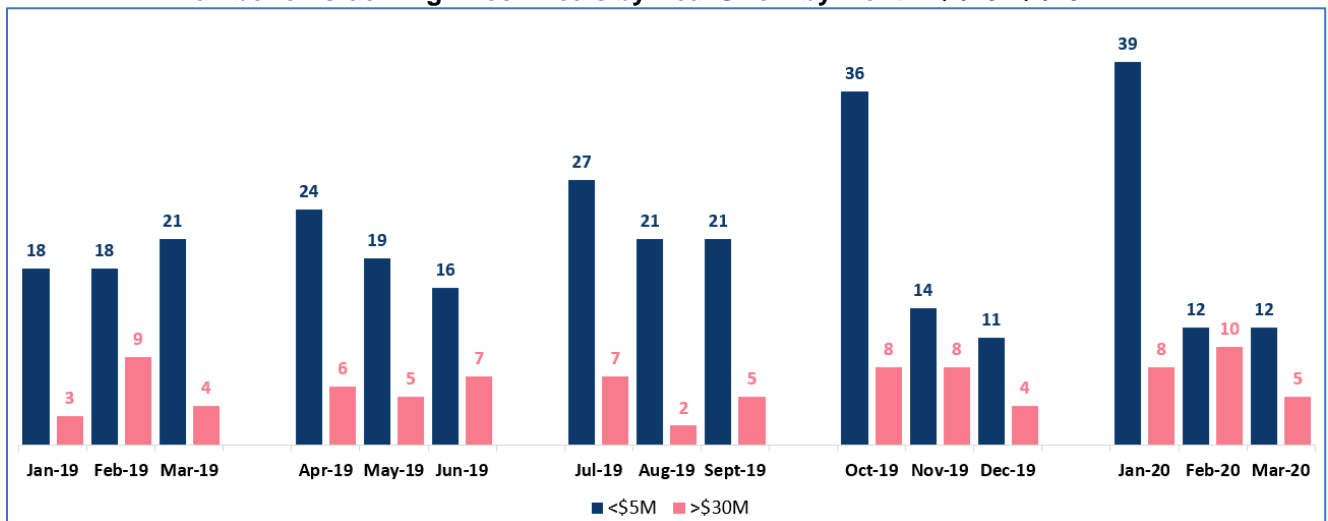


As observed in Q1/20, later rounds (C rounds and later) continued to lead capital raising, with 47 deals raising \$1.92 billion. Some 37% of the total capital volume was raised in March, mostly due to the mega-deals of Via (\$400 million) and Insightec (\$150 million).

Capital Raising by Deal Size

Q1/20 registered 43 deals in the \$5 million to \$20 million range, a decrease of 12%, compared with the previous quarter and last year's corresponding quarter, with 49 deals each.

Number of Israeli High-Tech Deals by Deal Size – by Month Q1/19-Q1/20



The Israeli high-tech continued to see deals over \$50 million in Q1/20, with 11 deals accounting for \$1.5 billion, or 55% of total capital raised this quarter. These included six mega-deals that attracted over \$100 million each. Interestingly, out of all these deals made over Q1/20, four were closed during March, including Via's \$400 million mega-round.

Conclusion

The first quarter of 2020 continued the previous years' trends, while no inferences can be drawn from these figures for the next period.

Israeli high-tech companies in growth stages showed their ability to raise capital, however they will also need to adjust their expenses and growth forecast.

The capital raising by early-stage companies (Seed and R&D stages) has continued to decline throughout the first quarter of 2020, and apparently, the world crisis following the Coronavirus pandemic will lead to a decrease in venture capital activity and especially, the establishment of new companies in Israel.

About the Authors of this Report

[IVC](#) is the leading online provider of data and analysis on Israel's high-tech & venture capital industries. Its information is used by key decision-makers, strategic and financial investors, government agencies, and academic and research institutions in Israel.

[ZAG-S&W](#) (Zysman, Aharoni, Gayer & Co.) is an international law firm with offices in Israel, the United States, China and the UK. The firm's attorneys specialize in all disciplines of commercial law for both publicly held and private companies, with particular expertise in hi-tech, life science, international transactions and capital markets. (ZAG-S&W 05.04)

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11.3. IRAQ: Looming Challenges for Iraq's New Government

Kirk H. Sowell posted in [Sada](#) on 2 April that Iraq's new Prime Minister-designate Adnan al-Zurfi faces opposition amid a political, fiscal and now global pandemic crisis.

Over the past month, Iraq has confronted two severe challenges: an economically-crippling oil price war between Russia and Saudi Arabia and the spread of the coronavirus epidemic from contacts in Iran. Of all the countries negatively impacted by the recent collapse in oil prices or the viral outbreak, Iraq is particularly ill-prepared in terms of fiscal and institutional capacity. These obstacles hit Iraq amid a political crisis that arose following the October 2019 protests. While becoming a near-constant feature of public life, protests over socio-economic and public service-related grievances were relatively muted through most of 2019 until abuses from security services in late September and October provoked a renewed wave of demonstrations in the country. Before being shut down by the pandemic, initially peaceful protests began to result in major disruptions blocking roads, damaging infrastructure and the deaths - at the hands of security services - of close to 400 civilians. The protests drove Prime Minister Adel Abdel Mahdi to resign in late November. Although he stayed on in a caretaking capacity, the country has been operating without a central government with the authority to pass a budget or sign contracts since 1 December. Yet on 16 March, Iraqi President Barham Salih appointed former governor Adnan al-Zurfi to form a government as the country's new prime minister-designate.

Under constitutional guidelines, the designation of a government should take no more than 45 days – 15 days to designate the candidate of the largest bloc as premier and 30 days to select and present a cabinet to parliament for approval. Parliament waited until 4 December to request that President Salih designate a new premier, extending the deadline to 19 December. Over the course of December, a series of candidates were put forward, most of which fell aside not only due to the lack of political consensus, but also because they stirred protests, with activists often chanting against specific candidates by name. The political crisis received a brief respite in early January as a result of the intervening crisis and exchange of military attacks on Iraqi soil between the United States and Iran. This led to a non-binding parliamentary vote - without quorum - demanding the removal of U.S. troops from Iraq. Abd al-Mahdi's unusually strong speech during that 5 January session led to a renewed effort by Iran-aligned blocs to have him remain in office. But a mixture of political and protester opposition foiled that effort.

Late January and all of February revolved around finding a new candidate, and the nomination and failed effort to form a new government under Muhammad Tawfiq Allawi, a former communications minister. A

Shia cross-party committee established in early March never reached a consensus, and with the deadline for appointing a new candidate approaching, President Salih chose Zurfi. His political views are closer to President Salih's than any of the previous nominees. As governor of Najaf for nearly seven years over three terms, Zurfi promoted a political vision based on encouraging economic ties with the industrialized West while sidelining Iran-backed militia factions. He is not only perceived as pro-American on military issues but is an American citizen himself, having lived in the United States before 2003. Precisely for this reason, the main opposition to him has come from the Iran-aligned factions and Shia factions independent of Iran. Yet the pro-Iranian groups' militia wings give his opponents greater weight than they otherwise would have. In addition to Badr Organization under Hadi al-Amri's leadership, Asaib Ahl al-Haq (AAH) has been outspoken in his opposition to Zurfi. At the moment, these factions do not have the seats to deny Zurfi election, assuming he obtains Kurdish and Sunni support, which he will likely receive if the implied threat of instability from Iran-backed groups does not intimidate parties into backing down.

If elected, Zurfi will face two other immediate crises in addition to the country's ordinary political dysfunction. The first is a fiscal crisis fueled by the collapse in oil prices stemming from the pricing war between Saudi Arabia and Russia. Iraq's foreign debt is relatively low, but the greater threat to Iraq comes from what one might call "internal default." Iraqi society is deeply dependent upon direct salaried employment, pensions and other payments, including the social security system and the state food aid system which both subsidizes the agriculture industry and provides nutrition aid. Were the state to default on these internal payments, much of Iraq's population would go hungry.

The Iraqi government's lack of reserves and modest non-oil revenue means it would default quickly were it not for its ability to borrow from the Central Bank's hard currency reserves. These reserves - while significant at over \$80 billion due to oil sales - are not infinite. Baghdad needs oil prices to reach \$60 to 65 per barrel to keep state institutions running with no capital investment. Based on publicly-disclosed figures available funds, in a worst-case scenario with oil prices remaining under \$30 per barrel, Baghdad could be insolvent within 12 months. If oil prices gradually rise this year and average around \$50 next year, it could stretch available funds through 2021. However, by then, the country would have gone several years with no meaningful development, leaving it vulnerable to widespread public sector cuts if oil prices dropped again.

The second immediate crisis is the COVID-19 pandemic. Iraq's health system was already overwhelmed when the epidemic started, and it lacks testing capacity to estimate the outbreak's reach in the country. The government has restricted movements in Baghdad and other major cities while also closing some mosques and banning other gatherings. The Health Ministry's count of confirmed cases has yet to reach 1,000, but with a multitude of contacts with highly-infected Iran and very limited testing, it will be unclear how effective these measures have been until the ultimate death total is clear.

It is not yet clear whether Zurfi will be able to form a government or not, but if he does, it will be tasked with a multitude of hurdles. The newly-formed government will lack a working majority in parliament, face both a fiscal collapse and a likely health crisis, and need to navigate a hostile and well-armed Iranian-backed opposition. Even more, the government will need to deliver its mandate to bring out early elections as protesters have demanded. With the COVID-19 pandemic serving as a good reason not to hold votes, the new elections will probably be the easiest of these challenges to dismiss. Managing fiscal, political, security and health crises all at once will be the Zurfi government's real test.

Kirk H. Sowell is the publisher and editor of the biweekly newsletter Inside Iraqi Politics. (Sada 02.04)

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11.4. GCC: How COVID-19 Will Change GCC Labor Markets

Karen Young posted in [Al-Monitor](#) on 3 April that a siren is blaring for local labor markets as the global pandemic and falling oil revenues begin to upend the Gulf states' economies.

If the late 2014 decline in oil prices and subsequent hit to GCC fiscal revenues is any guide to the current oil glut, the signal now to Gulf labor markets is a siren. When oil revenues declined sharply in late 2014, the structural fundamentals were similar to what OPEC+ members thought they saw in early March 2020. They saw declining demand in China and persistent supply from US producers. OPEC, with new partners like Russia and Mexico (the "plus"), responded in late 2016 with production cuts that held prices steady in the range of \$50-70 per barrel until the agreement fell apart on 5 March.

Since then, oil prices have been in free fall, reaching under \$20 per barrel, as Saudi Arabia committed to expand production and flood markets with product. Barring some unlikely cooperation that would require private firms across the United States and Europe to agree to trust Russian oil producers and the Saudi government, oil producers are bracing for impact. What is profoundly different from the price volatility five years ago, and what the Saudis and Russians surely could not have fully foreseen, is the demand destruction from the novel coronavirus pandemic that has wreaked havoc on the largest economies in the world.

The siren is blaring for labor markets because the last oil market downturn spurred a series of policy shifts with "nationalization" of jobs in certain sectors, more flexible visas, new taxes and fees on the backs of foreign workers and vast purges of low wage workers in construction. New nationalization policies across the GCC are meant to encourage and safeguard certain jobs for citizens. Oman blocked foreigners from working in more than 80 job categories. Saudi Arabia reserved employment to nationals in a number of retail and hospitality sectors, from mobile phone shops to eyeglass stores. The decline in government contracting, a cyclical normality to GCC economies when oil revenues drop, was especially sharp between 2015 and 2018. Expatriate workers felt that pain as low wage construction workers found themselves stranded and unemployed. As many as 700,000 foreign low wage workers were laid off in Saudi Arabia and went home to poor communities in the Middle East and South Asia unable to support their families.

For Gulf economies with a disproportionate number of foreigners to citizens, governments enacted taxes and fees that would turn foreigners into new sources of revenue, including the institution of road tolls, visa renewal fees and excise taxes on alcohol, tobacco and sugary drinks. In all, the last downturn spurred some diversification measures that did less to wean governments from oil revenue than to encourage governments to pull back on some generous social spending and ending the normalization of government subsidies of electricity and water as well as expected public sector jobs for citizens.

In the five years since 2015, foreign workers across the Gulf have been scrutinized by GCC governments for their utility as consumers and sources of government revenue in taxes and fees. Governments have also seen where lower skilled labor is a useful entry point for nationals in the workforce, especially in Saudi Arabia's retail and service sectors. Those expatriates with investment potential as real estate buyers or highly skilled experts have received some privileged residency status opportunities.

This time, the pain will be broader across labor markets. There are a few reasons. First, governments around the world are seeking policy measures to ease the burden on workers, as unemployment in the service sector and retail jobs surges. GCC governments have little incentive to give cash supplements to displaced workers, as most are foreigners. The assumption is that unemployed foreigners must return home, usually within a 30-day period of termination. Moreover, the legal requirements that firms and organizations have toward foreign workers may be changing, in some cases making it easier for businesses to lay off workers. The UAE enacted a new regulation on 26 March that allows employers to make workers redundant but must still provide housing (if provided contractually) and allow the employee to transfer his or her visa to a new employer if a new position is found. It also allows the employer to temporarily reduce salaries or force employees to take paid or unpaid annual leave. Saudi Arabia has announced partial salary support for citizens working in the private sector who are made redundant, but no support for foreign residents.

Second, GCC governments are responding with stimulus packages that mainly provide liquidity to the banking sector and provide some minimal support to small and medium-sized businesses. As coronavirus cases mount across the region and the burden extends to health care systems, governments will need to

make difficult decisions about extending care to all citizens and residents, as King Salman bin Abdulaziz Al Saud has committed to do. But many private hospitals in Saudi Arabia are reliant on the government for payment from the General Organization for Social Insurance, Ministry of Health or National Guard. They may see payments delayed as the government extends benefits across the population and struggles with a number of fiscal burdens. But these packages are unlikely to stem the losses in the largest employers in the region — state-owned or state-related entities from airlines to logistics and major contracting firms. These businesses will need major recapitalization just to survive and they will not survive with the same number of employees.

Third, people will want to go home. The social impact of the pandemic on transnational labor will be devastating. The panic of repatriating stranded citizens as borders have closed and flights have been canceled over the last few weeks has created a new reality for global labor. From retail workers to senior executives, many expatriate workers are finding it unsettling to be quarantined in a foreign country, without family support or familiarity with health care norms. We should expect the end of the school term and beginning of Ramadan to prompt departures of expatriates from the Gulf.

The economies of the GCC states will experience major changes from the twin COVID-19 and oil crises, as will the global economy. The societies of the GCC states, however, may be the most changed in terms of their demographic composition and reliance on foreign labor. This could be a moment for recalibration of reliance on foreign workers. It could also be a moment in which standards of living are drastically downshifted as a vibrant consumer base is weakened by expatriate exits.

Karen Young is a resident scholar at the American Enterprise Institute (AEI), where she focuses on the political economy of the Gulf Cooperation Council states and the broader Middle East. (AI-Monitor 03.04)

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11.5. OMAN: Is Oman's Model of Governance About to Shift?

Sebastian Castelier posted in [AI-Monitor](#) on 9 April that Oman's debts are piling up as oil prices crash, putting at risk its wide-reaching social welfare system.

Like other Gulf states, Oman does not grant citizens freedom of expression or the right to choose their leader, but it does provide citizens a range of material advantages: public sector jobs, subsidies, free health care and education, a free plot of land, a pension and no income tax.

However, Oman's public debt has skyrocketed since oil prices declined in 2014, going from less than 5% of Oman's gross domestic product to nearly 60% last year. Until 2023, annual budgets were already expected to be in the red. But the 2020 fiscal deficit is expected to be four times higher than previously forecasted because of the double shock of the COVID-19 pandemic and plunging oil prices, credit rating agency Fitch estimated.

To reverse the trend, the cash-strapped Omani government is expected to cut down on public expenditures and impose austerity measures. But such a move would revamp the model of governance that has prevailed since the late Qaboos bin Said ascended to the throne in 1970.

'Make the Public Sector Unattractive'

Public policy analyst Ahmed al-Mukhaini believes the era of "total dependence" on the government is about to end. "There will be more and more participation from the population, as the government will use the limited resources available more wisely," he said.

In March 2020, the Ministry of Finance cut budgetary allocations to government agencies by 5%, as a global oil price war sparked by Saudi Arabia is expected to disrupt Oman's finances (72% of Oman's revenues come from the hydrocarbon sector).

Public taxation is also increasing. A sin tax was implemented in June 2019 on products like sugary carbonated drinks and tobacco, and a serially delayed 5% value-added tax is expected in 2021. According to sources, electricity and water subsidies could soon be slashed and, in the long term, Omanis could see an income tax.

Issam Abousleiman, the World Bank's country director for the Gulf Cooperation Council countries, told Al-Monitor that several complementary policies "should happen at the same time," including "targeting of social protection, where possible." Abousleiman said the pension system is not at risk of revision, and he called for high-quality government services, "notably in education and health."

Above all, reforming the labor market — an unpopular move — would be the cornerstone of a post-Qaboos welfare state. About 43% of Omanis work for public entities. Abousleiman recommended economic diversification to foster private sector job creation and to further "relieve the expectations on the government to provide employment."

"The government would have to work very hard on how to make the public sector unattractive," Mukhaini said. Following a field visit to Oman in 2019, the International Monetary Fund (IMF) suggested that the wages and benefits of the private sector need to align more closely with the public sector to make employment in the former more appealing. Salmi believes Omanis should be "compensated" for any losses following a decrease in benefits and foresees an increase in public participation in politics via the country's legislative body, the Majlis al-Shura.

Cutting Royal Expenditures

Omanis who talked to Al-Monitor, as well as Mukhaini, believe any upcoming austerity measures "should not make the poor poorer and the rich richer," Mukhaini said. "People would only accept fair reforms, or else will unite and come [together] to do strikes," an Omani professor said. According to rating firm S&P, the new ruler will face "a difficult trade-off" in the coming months to address high unemployment among youths, weak growth, and fiscal and funding pressures. Oman's Ministry of Finance did not reply to Al-Monitor's request for comment.

Sultan Haitham bin Tariq "is already planting the seeds by cutting the royal expenditures tremendously," Mukhaini said. "The new ruler recently laid off 51 advisers who served his predecessor. The previous sultan had a lavish lifestyle, palaces and entourage."

Beyond reducing public spending, Oman — rated junk by the three major rating agencies — has several other options to fund its short-term ballooning deficit: Go further into debt; deplete its sovereign wealth fund; sell state assets; devalue its currency; and seek assistance from neighboring countries or international organizations.

'Put the House in Order'

In the long term, heavy reliance on hydrocarbon revenues is unsustainable, as the world is "gradually moving away from oil," the IMF said in a February 2020 report. Analysts believe Oman should build a model of governance tailored to the post-oil era. Along with a more stringent budget environment, the new leadership pledged to implement structural reforms to diversify the rentier economy and foster private sector-led growth.

Why didn't these structural reforms take place sooner? To ensure political and social stability, Sultan Qaboos avoided controversial measures that could have triggered short-term political unrest and instead relied on the country's long-term road map. In 2011, at the height of the Arab uprisings, Sultan Qaboos promised to create 50,000 jobs and institute unemployment benefits in an attempt to defuse unprecedented

nationwide protests. “The sense of urgency was not there,” Mukhaini said, in reference to the former leadership. “Either Sultan Qaboos’ immediate circle was not transparent enough with him or they did not realize the degree of the severity [of the economic situation].”

Yet the lack of economic reforms did not stop Omanis from loving the monarch, who built a modern state out of a medieval-like society he inherited in the early 1970s. Mukhaini said that “Omanis found an excuse for Sultan Qaboos” since the ruler “focused on the stability of the region and foreign affairs issues before he died, more than internal ones.” Defense and security expenses account for over a quarter of Oman’s annual budget.

When Qaboos — the longest serving Arab leader — died in January 2020, economic rationalism became the keyword as the coronavirus pandemic and declining oil prices weaken Oman’s precarious fiscal situation, with large debt maturities scheduled for 2021 and 2022. The relationship between state and society that Omanis have known for decades will likely never be the same. “Now, Sultan Haitham’s instructions are really to put the house in order,” Mukhaini said.

Sebastian Castelier is a journalist who focuses on the Gulf. He contributes to several Middle Eastern and international media outlets. (AI-Monitor 09.04)

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11.6. OMAN: The Business Diplomats - the Power of Bania Traders in Oman

On 13 April, Manishankar Prasad commented in the [Arab Gulf States Institute in Washington](#) that the Bania Indian-origin mercantile community is mediating the New Delhi-Muscat relationship in a low oil price Oman.

The Bania is a community of Hindu traders of the Mahajan caste from the westernmost Kutch region of Gujarat, India. Oman’s eastern port city of Sur is 600 miles from India’s port town of Mandavi, whose traders were selectively granted Omani citizenship on a case-by-case basis by the late Sultan Qaboos bin Said. This is a rare privilege unheard of elsewhere in the Gulf region, especially for minority outsiders. The title of sheikh was bestowed by the late sultan to Mandavi’s community elder Kanaksi Khimji, who manages the relationship with the Omani authorities on behalf of the tribe. After 1970, Oman attempted to integrate different communities, including the Bania, as part of Qaboos’ national building initiative.

The first Bania arrived in Muscat in the 1780s. Bania clans have played an important role in elevating India’s relationship with Oman to the same level of importance as those with Saudi Arabia and the United Arab Emirates. India and Oman have had a special relationship since the early 1970s, and Indian workers form a large expatriate diaspora in Oman. India is an academic magnet for Omani students pursuing higher education in cities such as Pune, as well as a medical tourism hub with many Indian hospitals on the authorized list of the Omani Ministry of Health. Omani military personnel have been trained in Indian military training institutions since the colonial era.

India’s military access to Duqm port is crucial as India does not have access to facilities in other Gulf Arab states. The exceptional nature of the relationship is a function of a shared interest in maritime security and longstanding commercial ties.

The Bania and the Current Indian Power Elite

The Bania traditionally played the role of banker to the royal family during Oman’s glory days at the helm of a maritime empire that stretched from Gwadar to Zanzibar. In contemporary times, the Bania served as the go-to supplier of goods and services for government contracts due to the peculiar political economy of patronage between the merchant elite families and the Omani royal family. In the pre-Qaboos era, when Oman was not open to diplomatic ties with the outside world other than Great Britain and India, the Bania

were active players in the market. As the country flourished after 1970, Bania-owned retail and logistics businesses grew, further consolidating business ties with Oman.

In February 2018, Indian Prime Minister Narendra Modi spoke at a community outreach event at the Sultan Qaboos Sports Complex in Bousher that was financed by the Bania's Khimji family. The Bania community also supports schools, clinics and the century-old Shiva Temple in Muscat, where Modi offered prayers. Modi also visited Manama's Shreenathji Temple, the oldest in the region, during a visit to Bahrain. The optics of these temple visits are significant for the prime minister's Hindu nationalist voter base.

Before Modi, Indian-Omani relations were lukewarm, as the administration of his predecessor, Manmohan Singh, did not consider Oman and the Gulf states a foreign policy priority. That has changed under the Modi government. In December 2019, India's minister of external affairs, Subrahmanyam Jaishankar, visited Oman, meeting the Minister of Foreign Affairs, Yusuf bin Alawi. The two met again at the Munich Security Conference in February.

In addition, the governments of India and Oman signed an agreement on legal and judicial cooperation in civil and commercial matters, which was ratified in March 2020 in a royal decree by Oman's new sultan, Haitham bin Tariq al-Said.

The Omani Establishment Connection

As mentioned earlier, a few hundred Bania have been granted Omani citizenship by the royal family, which is unusual for non-Muslim minorities in the Arabian Gulf. A few thousand with Indian passports are multigenerational migrants who have investor or employment visas and run businesses as shadow partners with the Omani arbab, the visa sponsor under the kafala system of labor governance in the Gulf states.

Shadow businesses in Oman are operated on the ground by an expat, in this case, a Bania, while the official commercial registration of the organization is in the name of a local Omani citizen. Note that this form of rent-seeking, in which Omani sponsors are business owners on documentation but not active partners in shadow businesses, has been actively discouraged by the Omani authorities. However, Bania who are Omani citizens circumvent this arrangement as they are active businessmen themselves.

There are Bania in other Gulf states, such as Dubai, where some operate businesses in the district near the Dubai Museum. The neighborhood where the old Hindu temple stands is also under the stewardship of the Bania community, and newer temples are being constructed in Jebel Ali and Abu Dhabi. Dubai's ease of doing business and the decades of active Bania presence in the market has not eliminated the gap between a kharji, or foreigner, and an Omani citizen, even though the UAE permanent residence golden card scheme has recognized some of these early Hindu Bania traders. The difference between a Bania in Dubai who holds an Omani passport and a Bania on an Indian or another passport is that the former enjoys access to local power structures in Dubai, as well as ongoing investments that generate political capital back in Gujarat. This is especially the case in the Kutch region (financing schools, temples and hospitals, as well as recruiting youth for work in Oman), which helps foster dialogue between Oman and India, as Modi and India's home minister, Amit Shah, are both Gujarati. Also, local citizens can fulfill prerequisites to government contracts as nationalization requirements mandate local ownership.

The Omani Bania are integral to the supply chain of infrastructure projects in Oman, connecting the country to the global grid by operationalizing many local supplier in-country value contracts on behalf of global companies. In-country value is an important pillar of the evolving social contract between the private sector and the government in which local employment and sourcing is embedded in the public sector. It helps to integrate local value retention in the public sector tendering process.

China is investing in Oman as part of its Belt and Road Initiative, funding large-scale projects in Duqm. China and India are collaborating on Omani Belt and Road Initiative projects, in which Bania-operated companies are construction contractors, consultants, and suppliers with significant Indian human resources on these projects. An Omani-owned but Bania-helmed engineering consultant of an ICV partner played an

instrumental role in getting an Asian Infrastructure Investment Bank-funded solar project in Ibri off the ground.

Building Sustainable Indian-Omani Ties

The new Omani government may be able to tap into the global reach of the Bania network to mobilize talent and capital as the present generation is spread out extensively across Africa, East Asia and North America. Many Omani royals are active in the private sector, such as Sayyid Shabib bin Taimur, whose daughter Tania married a Khimji scion.

Recently, the Indian government purchased a stake in an oil field in Oman. There has been a significant investment from a Gujarat-based company, such as Sebacic Oman in Duqm, the only one of its kind in the Middle East. A close working relationship with the current Indian power elite can help attract more investments from Indian companies into Omani port centers such as Sur and Salalah, reinforcing the historical partnership between the two countries.

Manishankar Prasad is an independent researcher on the Gulf based in Pune, India. (AGSIW 13.04)

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11.7. EGYPT: Egypt's Fragile Pandemic Measures

Maged Mandour noted in [Sada](#) on 8 April that structural shortcomings in Egypt's health care system, labor market, and economic and social policies curtail the government's efforts to address a viral outbreak.

On 24 March, the Egyptian Prime Minister Mostafa Madbouly announced a series of measures to counter the threat of the COVID-19 pandemic. These included a two-week curfew from 8 p.m. to 6 a.m., punishable with a four-thousand Egyptian pound fine. The curfew was preceded by decisions to close all places of worship, schools, and universities, as well as measures to restrict public sector employees to essential staff. However, on 2 April, a spokesperson for the ministry of housing announced the lifting of these measures beginning on 4 April for the construction sector, which employs four million workers. Such an exception considerably reduces the effectiveness of the imposed restrictions. The government previously announced on 22 March an economic stimulus, including a three% reduction of interest rates, capital gains tax breaks for foreigners, capital gains tax payment deferrals for residents until the beginning of 2022, and the provision of EGP 100 billion to support the private industrial sector.

These initiatives, however, fail to address the economic and social structural weaknesses that position Egypt to be especially vulnerable to a viral outbreak. Such inadequacies stem from the prioritization of military spending in 2015. During this year, Egypt was the second-largest importer of weapons among developing countries, with imports reaching \$11.9 billion. This trend continued into 2020, as Egypt is currently in the process of negotiating a \$9.8 billion arms deal with Italy that is due to be announced on 25 April, the anniversary of Sinai's liberation. The government's economic reform has been driven by fiscal discipline and a reduction in government spending, which led to increased levels of poverty and weaker local demand. Such effects on consumers negatively limit the prospects of private sector growth, making the economy even more susceptible to shocks.

Moreover, the Egyptian health care system's chronic underfunding and fragility have become abundantly clear. For example, the percentage of health care spending witnessed a steady decline from 6.7% in 2000 to 4.2% in 2016. In FY2018/9, health care expenditures totaled to \$25 per citizen, an alarmingly low amount compared to the global average of \$1,000. This reduction will likely limit the healthcare system's ability to handle the large influx of patients expected in the case of a pandemic. Even more, there is a severe shortage of ICU beds. Egypt has only one bed per 813 citizens — Italy, whose health system is on the verge of collapse, has one bed per 363 citizens. Such a deficit is compounded by a severe shortage of medical staff. In 2019, the decline of ICU nurses reached 55%. As for physicians, 120,000 out of 220,000

locally-trained and educated doctors have left the country for employment abroad, a result of the health system's poor conditions compensation.

Other hurdles facing the Egyptian government's response to the crisis are the labor force and social welfare policies. The informal sector has reached an unprecedented level of predominance, which the Vice President of the Federation of Industries Tarek Tawfik has estimated to comprise over 50% of the economy in April 2019. The low level of participation in social security, which reached 48.1% in the total economy only adds to the challenges facing the economy. The percentage of social security participation significantly dropped in the private sector, amounting to 9.6% as of October 2019. Even more, 29.2% of the labor forces works as temporary labor. In order to address some of these concerns, the parliament passed a law that provides unemployment benefits of 75% of an individual's original salary for the first three months. Over the subsequent weeks, the benefits are reduced to 45%. However, this law would not apply to the majority of the Egyptian labor force, as most of them are in the informal sector, do not pay into social security, or are mostly working temporary jobs. The government's ability to provide support to those that are most likely to lose their jobs is thus severely limited. As such, the decision to impose a complete lockdown would result in considerable economic hardships and possible unrest.

In an attempt to support those in the temporary workforce amid the global COVID-19 crisis, the government has issued a one-time payment of five hundred pounds, the equivalent of \$32 - an insignificant amount in the face of a prolonged pandemic. On 28 March, the government also denied rumors that it will order obligatory leave across the private and public sectors, and pay the wages of private sector employees to help weather the crisis.

The Egyptian government has also consistently pursued economic policies that have weakened the private sector, making the economy poorly-equipped to handle the pandemic. The government's policies have reduced local demand, and hence, negatively affected the robustness of the private sector, as lower demand means lower opportunities for private sector growth. The regime's economic reform program has also created adverse economic effects. The reduction of government subsidies, the imposition of a value-added tax of 14%, and the floating of the pound resulted in the rise of the inflation levels, which increased from 6.9% in 2013 to 23.5% in 2017. This inflation growth led to increased poverty rates and a weaker local market.

In May 2019, the Egyptian Center for Mobilization and Statistics, a government agency, issued a report titled "Income, Expenditures, and Consumption." The findings indicated a sharp rise in the levels of relative and absolute poverty compared to 2015. Relative poverty rates rose from 27.8% to 32.5% in 2018, and the level of absolute poverty rose from 5.3% to 6.2% during the same period. Using 2015 prices, a drop in the level of family consumption accompanied the aforementioned rise of poverty levels by 9.7%. The drop was sharper in the urban areas, reaching 13.7%, compared to 5.1% in the rural areas. Such an increase in poverty rates not only leads to an increase in the level of social deprivation but also reduces disposable income. These circumstances can diminish the growth of the private sector. As expected, the non-oil private sector shrunk by the fastest rate in three years in January 2020.

Typically, a declining local demand can be offset by an increase in exports; however, the exports declined by \$1.66 billion between 2013 and 2018. Based on the Central Bank's data, in 2018, 41.1% of the value of good exports was derived from crude oil and related products, and the price of oil recently plunged by 24%, reflecting a multi-year low. This decline diminishes a vital source of revenue for the government. The expected losses in the tourism sector, which the Minister of Tourism Khaled Anani announced on 16 March, is expected to reach \$1 billion per month. This revenue loss hinders the government's ability to provide economic support to the most vulnerable or to bolster the health care services in a short period of time.

The preparedness of the Egyptian government to counter the pandemic is curtailed by structural weaknesses, reinforced and worsened by years of governmental policies. The lack of public accountability has allowed the Egyptian regime to implement policies that spent billions on arms and increased poverty, while the health and social security system crumbled. Egypt's gradual slide into a military dictatorship has led to a deliberate erasure of the political process and a dominance of military elites, which allowed the

regime to follow policies that promote the narrow interests of these elites. Such a governmental shift has left the state unable to perform one of its essential functions of protecting the populace in times of crisis.

Maged Mandour is a political analyst and writes the "Chronicles of the Arab Revolt" column for Open Democracy. (Sada 08.04)

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11.8. MOROCCO: Morocco 'BBB-/A-3' Ratings Affirmed; Outlook Stable

On 3 April 2020, [S&P Global Ratings](#) affirmed its 'BBB-/A-3' long-term and short-term foreign and local currency sovereign credit ratings on Morocco. The outlook is stable.

Outlook

The stable outlook on Morocco reflects our view that the adverse economic and budgetary impact of the COVID-19 pandemic will be contained without a lasting and structural damage to credit metrics. Once the impact of the COVID-19 is contained, we expect authorities to continue with further structural economic and budgetary reforms, leading to improved economic and budgetary performance and steady decline in the current account deficit.

We could raise the ratings if budgetary consolidation prospects improve materially or the ongoing transition toward a more flexible exchange rate bolsters Morocco's external competitiveness and ability to withstand macroeconomic external shocks materially. We could also raise the ratings if the country's ongoing economic diversification strategy results in less volatile and higher rates of economic growth.

We could lower the ratings if the government's budgetary performance deteriorates beyond our expectations, resulting in net general government debt above 60% of GDP; real GDP growth rates significantly undershoot our expectations over the forecast horizon; or external imbalances widen, resulting in a significant increase in the economy's gross financing needs.

Rationale

We expect that the COVID-19 pandemic will lead to a significant deterioration in Morocco's budgetary position. However, under our forecasts, economic growth should rebound in 2021 and allow the government to resume implementing its comprehensive structural reforms and budgetary strategy. We believe that the economic shock from COVID-19 can be partially alleviated by the recent widening of the dirham's fluctuation band from plus or minus 2.5% to plus or minus 5%. Moreover, we believe that the IMF-approved precautionary and liquidity line (PLL) from December 2018 underpins the country's macro-financial stability in the near term, and economic and budgetary policy objectives over our medium-term forecast horizon. Moroccan authorities can draw on the line, if need arises and especially if the pandemic does not subside by year-end 2020. In this context, we observe the completion of both periodic reviews by the IMF so far regarding the fulfilment of the PLL qualification criteria by Moroccan authorities.

We believe that the ongoing shift in the country's underlying economic structure, driven by substantial foreign direct investment (FDI) and a more resilient agricultural sector, both underpinned by the government's strategy to promote private sector activity and limit or - in some sectors - reduce the government's role in the economy, will benefit economic growth prospects and stability. As a result, overhauling the economic structure, along with higher economic growth after risks related to COVID-19 dissipate, should in our view lead toward gradually reduced economic vulnerability from persistent current account and budget deficits.

The ratings on Morocco are supported by moderate government debt and manageable current account deficits, amid relatively stable policymaking. The ratings remain constrained by GDP per capita lower than

that of similarly rated sovereigns, significant economic reliance on agriculture, high social needs, and a slow approach to budgetary consolidation.

Institutional and economic profile: Morocco's economy will be significantly hit by the pandemic

- The outbreak of COVID-19 and its implications for economic activity will, in our view, lead to a sharp downturn this year, with GDP close to stagnating.
- The government's policy measures include wage subsidies and loan holidays for affected employees, as well as corporate tax, loan, and social contributions holidays for small and midsize companies.
- We view the two-year IMF-approved liquidity line (worth about \$2.97 billion) as an important policy tool in the context of these risks, as well as a relevant policy anchor.

In 2019, real GDP in Morocco expanded 2.6%, reflecting a slowdown in Europe, as well as decelerating growth in the country's agricultural output. At the same time, non-agricultural value-added growth accelerated to 3.5%. However, we believe the coronavirus outbreak and its implications for economic activity will lead to a sharp downturn this year, with GDP close to stagnating. This will be driven by contraction in exports as well as stagnation in consumption and investment activity. We foresee a U-shaped recovery of activity starting in the second half of the year, but expect it will be fragile, because the situation is continuously evolving and it is difficult to predict when activity will rebound. Indeed, our macroeconomic projections are unusually uncertain, because they depend upon the evolution of what is a global pandemic and risks are skewed to the downside.

In Morocco, like in other affected countries, the imposition of strict quarantines and curfew and the closure of shops and restaurants because of the virus' spread are constraining consumer spending and economic activity more generally. Further restrictions on movement of labor and especially the duration of these measures by the government could tip the economy into a recession. Activity and employment in the tourism sector will likely suffer.

To counter the pandemic's adverse economic impact, the government announced a series of measures, including wage subsidies and loan holidays for employees, as well as corporate tax, loan, and social contributions holidays for small and midsize companies. These measures are being financed by a special fund, currently endowed with 30 billion dirham (about 2.6% of GDP) with contributions from the public and private sectors. The government has accelerated the payments to its private sector providers while the central bank adopted measures aimed at addressing rising liquidity risks given the sudden stop in economic activity, which are currently scheduled to be in place until the end of June. We view the IMF-approved liquidity line as an important tool in the context of these risks, as well as a relevant policy anchor. In our view, this has resulted in a number of policy measures being rolled out to improve the economy's performance and strengthen its resilience since December 2018. Moroccan authorities can draw on the line, if need arises and especially if the COVID-19 pandemic does not subside by year-end 2020. In this context, we observe the completion of both periodic reviews by the IMF so far regarding the fulfilment of the PLL qualification criteria.

The outbreak's onset interrupted what was likely going to be a year of accelerated economic growth. The government has reduced the economy's vulnerability to weather shocks by investing in more-efficient technologies in the agricultural sector via the Green Morocco Plan, as well as diversifying the economy. In this context, we believe that nonagricultural output, which had been accelerating, will continue to expand in line with past trends and reflect continuous FDI growth, once the shock of COVID-19 is overcome. The main sources of growth are the expanding auto, aeronautic, and electronics sectors, where we expect substantial output growth to continue at least through 2023. Indeed, the country has built comprehensive industrial clusters around its emerging auto industry. It has attracted a number of foreign car manufacturers, first from France and most recently from China.

As a result, the number of vehicles produced in Morocco has increased more than 2.5x since 2014, overtaking value exports related to phosphates and their derivatives a few years ago. Despite a decline in 2019-2020, phosphates and their derivatives will still represent an important share of the country's exports.

We also believe that tourism has substantial growth potential, although we expect it to be particularly hard hit this year. We expect the construction sector to contribute positively to overall economic growth following the reduction in COVID-19 risks.

We currently forecast that real GDP growth will average about 4.8% in 2021-2022, backed by the expected 2021 rebound, improved performance in nonagricultural sectors, and resilience in the agricultural sector. We also expect that the business environment and external demand will be restored following the slump and be supportive of the steady pick-up in nonagricultural output. To this end, the government has prepared an investment charter, small-business act, and tax system overhaul to introduce more stability and policy predictability for businesses. Moreover, to improve liquidity in the economy, the government has shortened its payment times to suppliers in 2019, and those of state-owned enterprises (SOEs), and has settled its payment arrears with the private sector. We believe that these measures will support the private sector's development, especially given this year's economic slump.

With Morocco's dependence on energy imports, FDI in the energy sector is increasingly important. The country aims to produce 52% of its power from renewable energy by 2030, which appears realistic, given that an estimated 35% of its current electricity production already comes from renewables (hydro, wind, and solar). Projects such as this, which ease the economy's dependence on external sources of energy, are positive because they support a further reduction in current account imbalances and insulate Morocco from energy price increases.

The government has also promoted several gas field exploration projects. Although they are unlikely to come on-stream over the next two years, they could further reduce Morocco's energy imports and benefit its trade balance. This vulnerability was most recently demonstrated in September 2019, when oil prices increased due to geopolitical factors. Because of the significant negative economic and budgetary effects, the government is considering a price-regulating mechanism that would prevent the full impact of oil price increases being felt by end-users. Instead, it would require the supply chain to absorb part of the pressure. If approved by the Moroccan competition authority, this mechanism could cushion the negative impact on the economy, in part by supporting households' disposable income, and allow for improved predictability in terms of budgetary outcomes. In the light of the significant decline in oil prices this year, however, the related pressure on the economy will ease.

Tackling other structural weaknesses, such as payment indiscipline among private sector companies and administrative hurdles in the business environment, could support the country's economic diversification and the resilience of its growth. We believe that the government's strategy to further improve the business environment, including access to finance, is likely to enhance the country's standing in the World Bank's Doing Business list. It is currently 53rd among 190 countries.

We believe that Morocco has largely demonstrated political and social stability, especially following the Arab Spring. It achieved this through constitutional reforms, a rise in government spending aimed at economic development, and reduction of economic inequality in less developed regions, with broad support from King Mohammed VI. The king chairs the Council of Ministers, which deliberates strategic laws and state policy orientations. His role in policymaking has held greater importance since 2017, when he intervened in curbing social tensions in the Rif and Jerada regions.

Although ethnic, tribal, religious, and regional divisions are less pronounced in Morocco than in much of the Middle East and North Africa, parts of the Moroccan population are increasingly demanding more inclusive economic growth. In our view, this partially stems from high unemployment among youth and the income disparities between more- and less-developed areas. At the national level, unemployment appears low and falling, but the differences among population segments are significant (higher in urban areas, and for youth and women). Moreover, we believe that higher participation by women in the labor market (estimated at 22.2% in 2018) could significantly increase the country's economic growth potential.

The government has expressed its willingness to accelerate the implementation of regional development programs and decentralization of the state to reduce income disparities, including by tackling high unemployment. In this context, the 2020 budget includes creation of a Business Finance Support Fund for

economic and social development supporting projects of young graduates, very small businesses and export-oriented companies. The fund is endowed with 8 billion dirham over three years by the state (3 billion dirham), banking sector (3 billion dirham) and Hassan II Fund (2 billion dirham). We believe that such social demands will persist and constrain Morocco's budgetary position, delaying a faster reduction in the budget deficit over our forecast horizon. Nevertheless, to the extent they are directed toward improving education and labor market outcomes, these policies could boost the country's growth potential in the medium-to-long term.

Flexibility and performance profile: The next stage in exchange-rate regime liberalization has started

- We project the budget deficit will widen beyond 5% of GDP in 2020 because of the economic and budgetary implications of the coronavirus outbreak, before budgetary consolidation resumes.
- We expect net general government debt to rise to slightly above 55% of GDP in 2020.
- In March 2020, authorities launched the second phase of the gradual currency liberalization reform by widening the fluctuation band for the dirham to 5.0% from 2.5%.

Excluding the privatization proceeds, the budget deficit widened to 4.1% of GDP in 2019, mainly because of lower-than-planned income tax and value-added tax receipts, while government spending performed broadly in line with the budget. In 2019, the government started implementing its strategy of promoting private sector activity, including the establishment of public-private-partnership-like schemes, themselves including concessions to private sector investors. These should allow the government to reduce public investment outlays and build on its assets.

The government has been addressing the rising social demands for better living standards, including education and health care, and tackling high unemployment rates in poorer parts of the country by strengthening social protection programs. This includes the National Human Development Initiative, aimed at supporting vulnerable parts of the population and funded from public and private sources. Morocco provides socially sensitive subsidies on basic goods (flour, sugar and liquefied petroleum gas) and is implementing a single subsidy registry to provide better-targeted and efficient support. On the revenue side, we view favorably the government's plans following the tax system conference in May 2019 to broaden the tax base to improve collection. This includes reducing tax exemptions to benefit investment activity and attempting to address sizable tax avoidance and evasion, while targeting the vulnerable social groups.

However, the economic and budgetary implications of COVID-19 will test the government's commitment to budgetary consolidation. Because of the cyclical impact on revenue and the government's budgetary measures to alleviate the economic impact, we expect the 2020 budget deficit to widen to beyond 5% of GDP, compared with the government's budget target of 3.7% of GDP.

As a result, we forecast that the net general government debt-to-GDP ratio will jump to 55.4% of GDP this year from 51.7% of GDP in 2019 before stabilizing at above 55% of GDP over 2021-2023. Given the government's commitment to privatize assets worth approximately 4% of GDP during 2019-2024, if fully implemented, net general government debt would decline faster. The average maturity of the central government debt outstanding stands at about 6.9 years, with the average interest rate estimated at 3.9% at year-end 2019. Almost 80% of government debt is dirham-denominated, limiting Morocco's debt service sensitivity to exchange-rate volatility.

In terms of contingent liabilities, represented predominantly by the existing stock of state guarantees to SOEs, we believe that the government's overhaul of SOEs' roles is credit-positive in several ways, beyond the use of privatization proceeds in the budgetary consolidation process. If fully implemented, it would contain and reduce the contingent liability risk for the sovereign balance sheet, while likely improving productivity and efficiency of business outcomes. It would also stimulate private sector activity, which has become a key economic policy strategy for the government.

The Moroccan dirham is pegged to a currency basket of 60% euros and 40% U.S. dollars. The foreign exchange peg limits monetary policy flexibility, in our view. However, this is gradually changing. In January 2018, Moroccan government and the central bank, Bank Al Maghrib (BAM), decided to increase flexibility

in the exchange rate regime by widening the band of fluctuation between the dirham and the basket of currencies to 2.5% in either direction from the previous 0.3%. More recently, in March 2020, authorities launched the second phase of its gradual currency liberalization reform by widening the fluctuation band for dirham from plus or minus 2.5% to plus or minus 5%. At the time of the launch, the reserve coverage was slightly above five months of current account payments. We view this process positively for our overall monetary assessment on Morocco because we believe it helps improve the country's external competitiveness and ability to withstand external macroeconomic shocks, including the current one.

In light of the macroeconomic developments and accounting for medium-term inflation trends, the BAM decided, with a view to supporting economic activity, to reduce the key policy rate by 25 basis points to 2%. At a time of the adverse economic and financial impact of COVID-19 and to alleviate pressure on its liquidity, the BAM is also providing extensive support to the banking system through widening eligible collateral and extending maturities for central bank repo facilities. Although the banking sector appears to be moderately capitalized, it is unlikely to pose a significant risk to the wider economy, given its adequate regulatory Tier 1 capital ratio of 10.9%. Although nonperforming loans constitute a relatively high proportion of the total, at above 7% at the end of 2019, they appear adequately provisioned. Nevertheless, the banking sector remains vulnerable to credit concentration risks. The banks' expansion into sub-Saharan Africa has so far been highly profitable, but it opens new channels of risk transmission to the country's banking system.

We expect Morocco's current account deficit to continue declining trend over our projection horizon. In 2018, energy-related imports increased almost 20% and pushed it to 5.5% of GDP. In 2019, it narrowed by almost 1% of GDP and this year's sharp decline in oil prices will benefit the external balance despite the decline in external demand for the economy's goods and services, like tourism. A downturn in domestic demand implies lower imports, which together with the dynamics in other items clouds the picture on the overall impact on the current account. In this context, trends with respect to remittances, which are a significant driver of foreign currency reserves, will be important. We view as the level of foreign currency reserves as comfortable. However, should it come under pressure, we believe that the existing PLL with the IMF offers the authorities ample flexibility in using if necessary.

The external liabilities position will remain large over the next three years, and we forecast narrow net external debt as a proportion of current account receipts (CARs) of 30%-40% in 2019-2022. We also forecast external financing requirements will remain covered by CARs and usable reserves over this period. (S&P 03.04)

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11.9. MOROCCO: Digitalization and the Coronavirus in Morocco

Anja Hoffmann and Bauke Baumann posted in [Qantara](#) on 8 April that with a series of digital measures introduced in response to the coronavirus pandemic, Morocco is creating a trade-off between ways to provide rapid support and the parallel development of digital control.

The Kingdom of Morocco reacted swiftly and decisively to the threat of the coronavirus pandemic. Although the official infection rate is still comparatively low, the country declared a state of emergency and imposed a strict one-month curfew on 20 March.

All national and international flights and train and ferry links were suspended. Moroccans are only allowed to leave their homes to buy food, in medical emergencies or to travel to work where it is absolutely necessary. The police and the military are monitoring the curfew closely and consistently. Even something as simple as a trip to the supermarket generally involves showing a pass stamped by the authorities at various checkpoints.

Digital solutions to compensate for loss of earnings in the informal sector

Morocco has every reason to fear the coronavirus: the public health system is ramshackle and overstrained even at the best of times. In addition, there is a shortage of doctors, hospitals and health centers in many regions outside of the major cities.

However, although the lockdown may make perfect sense from a medical perspective, it deprives millions of Moroccans of their livelihoods in one fell swoop. Housekeeping staff who carry out a range of care-related duties in private homes, street vendors who peddle their wares at markets and catering staff without permanent contracts have lost their entire income because of the lockdown. More than 2.4 million Moroccans work permanently in the informal sector – not to mention seasonal agricultural laborers.

Now, these people are to receive quick and simple support – with the help of modern technology. Shortly after the lockdown began, Morocco's Economic Monitoring Committee pledged to provide swift support for those in the informal sector who have lost their earnings.

According to a joint statement released by Morocco and the European Union on 27 March, the EU has pledged €450 million in aid to help Morocco counter the coronavirus: the EU will transfer €150 million immediately to a special fund created by Morocco to respond to the coronavirus, while the rest will be allocated to help Morocco meet financial challenges relating to the pandemic. Anyone without a social security number will soon be able to register for the support by entering their telephone and identity card numbers in a digital database. Within hours, they should receive a code by text authorizing them to withdraw a lump sum calculated according to the size of their household at one of more than 10,000 banks, cash machines and money transfer agencies across the country.

Digital is better – but for whom?

This laudable and hopefully effective way of providing support to the poorest members of society could at the same time in the long-term help to reach a goal which, despite various decrees and legislative processes in recent years, the Moroccan government has failed to attain. Namely, this is the formalization of informal employment arrangements. That would in turn lead to an additional generation of contributions to public tax and welfare coffers.

Studies estimate that the Moroccan state misses out on annual tax revenues of MAD 40 billion (approx. €3.6 billion) from the informal sector. The database now being set up as a result of the COVID-19 crisis, with its "voluntary" self-registration, will provide an excellent foundation for this undertaking in the future. At this moment in time, many Moroccans have no other option but to register for the rapid public compensation scheme if they are to secure their livelihood.

In the event that the data will potentially be put to secondary use, it is hoped that the ongoing formalization of the informal sector will be conducted in a socially-responsible manner and that the pursuit of greater transparency and compliance will not put at an even greater disadvantage those who already suffer systematic marginalization, e.g. single mothers, unskilled laborers on building sites and in agriculture, and all those who engage in casual work to make ends meet.

So far, Moroccan media reporting on the consequences of the coronavirus pandemic has been quite deficient. Most people glean their information from social media, which of course includes plenty of false information. While it is important to invalidate such information, criminalizing it is less expedient.

But this is precisely what the Moroccan government is doing: in a surprise move on 19 March, it presented a bill aimed at creating a legal basis to stem the spread of fake news on social media. Journalists and activists see this as an attempt to exploit the COVID-19 crisis to further restrict the right to freedom of information and freedom of thought – without any public debate. A dozen people have already been arrested on this basis on allegations of spreading false reports or more specifically because they spoke out publicly against government measures.

A coronabot and apps for specialist medical staff

The crisis is resulting in the emergence of new apps that would certainly have been a great help to the Moroccan health system even before COVID-19. Recently, the French-Moroccan start-up Dakibot unveiled a new free chatbot providing users with automatic answers in Moroccan Arabic to questions concerning the coronavirus. The answers provided are based on information from the Moroccan Ministry of Health and the WHO.

On 30 March, the Moroccan Ministry of Health also launched a new app for doctors, specialist medical staff and experts in a bid to ensure faster and improved exchange among experts in relation to medical strategies in the battle against the virus. Indeed, the corona pandemic is shining a light on the ambivalence towards digital, data-driven solutions in Morocco. In the short-term, the new digital offerings are a good and rapid way to provide care and support, for example to those in precarious employment. In the long-term, the measures could turn into a boomerang that facilitates the digital control of citizens and bolsters socio-economic exclusion mechanisms. (Qantara 08.04)

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11.10. TURKEY: Turkey Pursues Libya Campaign Despite Growing Financial Woes

Fehim Tastekin posted on 5 April in [Al-Monitor](#) that Turkish President Erdogan is pressing ahead with his military venture in Libya even as the coronavirus pandemic is putting further strain on Ankara's cash-strapped coffers.

As the coronavirus crisis rages across the world, those who hoped that guns might now go silent in theaters of war are finding their desires dashed. In Turkey, where the pandemic is bruising an already crisis-hit economy, President Erdogan has showed no sign of backing down from his cross-border military ventures. He seems unperturbed by budget constraints as he presses ahead with his intervention in Libya — and in Syria, as a matter of fact. Never mind that he has had to call for donations to help the needy in the coronavirus pandemic, stunning millions who expected support from the state but were effectively told that Ankara's coffers are empty in the fight against COVID-19.

Turkey's role in the Libyan conflict has once again come to the fore amid a renewed escalation around Tripoli since 25 March.

Turkey's allies have launched a fresh offensive against Khalifa Hifter's Libyan National Army, backed by the United Arab Emirates, Egypt, Saudi Arabia and Jordan, in what is suggestively called Operation Peace Storm. Evoking Turkey's Peace Spring and Olive Branch operations to undo the Kurdish self-rule in northern Syria, the name in itself speaks of Turkey's influence in Libya, where Ankara backs the Tripoli-based Government of National Accord and its Islamist allies.

Turkish military commanders and intelligence officers appear to have a decisive say in the operation center at the Mitiga military academy near Tripoli at present. Erdogan himself had stressed at the outset of the intervention that the Turkish military's role would focus on command and coordination.

The latest push of the Tripoli- and Misrata-based Islamist forces that Turkey backs aimed to capture the al-Wattia air base, held by Hifter's forces since August 2014. Located some 160 kilometers southwest of Tripoli, al-Wattia is the second most strategic base in the area after the Mitiga airport. Hifter's forces suffered heavy losses and lost the base on the first day of the operation, in which the active involvement of Turkish drones tipped the balance. Government of National Accord-backed forces along the Tripoli-Misrata route launched simultaneous assaults on Hifter's forces at Rashfana, Ahia Barria and Naqlia Camp near Tripoli and Abu Qurayn and al-Washka to the west of Sirte.

In a counteroffensive on 26 March, Libyan National Army forces recaptured al-Wattia. They did not stop there, however, and marched on to Zuwara and surrounding settlements to the north and then to the

Tunisian border, seizing a number of towns in the area as well as the Ras Ajdir border crossing. With their route to Tunisia now cut, the Government of National Accord and its Islamist allies have taken a huge blow.

Along the coastline, meanwhile, the Libyan National Army besieged Zuwara both from the south and the west. Should Hifter's forces manage to take Zuwara, some 100 kilometers west of Tripoli, they could turn up pressure on the besieged capital from the coast. If Zuwara falls, the nearby city of az-Zawiyah might not be able to hold out for too long, either. The counteroffensive resulted also in the capture of Wadi Zamzam, some 238 kilometers southeast of Tripoli.

Hifter's forces have raised various claims regarding Turkey's involvement. According to the Libyan National Army, a Turkish Bayraktar TB2 drone that took off from the Mitiga airport was shot down near Tripoli on 30 March. The Libyan National Army also claimed that missiles fired from a Turkish warship off Tripoli targeted its positions in al-Ajailat on 1 April, without causing loss of life.

Meanwhile, a French navy frigate was reported to have intercepted a Turkish cargo ship in the Mediterranean on suspicion it was taking weapons, including air defense systems, to the Government of National Accord. The incident took place before the European Union launched, on 1 April, a new naval mission dubbed IRINI — which means “peace” in Greek — to enforce the arms embargo on Libya.

Another striking reflection of Ankara's involvement in Libya is the mounting death toll among the mercenaries Turkey has transferred from Syria. According to the Syrian Observatory for Human Rights, the number of Syrian fighters killed in Libya has reached 156. The Libyan National Army, for its part, claims that some 500 foreigners have been killed while fighting in Government of National Accord ranks.

To limit the number of the Turkish boots on the ground, Erdogan relied largely on Syrian mercenaries, who came from various groups aligned with Turkey in Syria. According to the observatory, the number of Syrian fighters transferred to Libya has reached 4,750, with about 1,900 others in Turkey for training.

Yet Syrian fighters seem to regret joining the Libyan war. According to the observatory, some of them claim Turkey has failed to pay them the promised monthly salaries of \$2,000. “Turkey paid our salaries for only one month. It has not secured anything for us. Even cigarettes, we hardly got them. We stay in a house but we cannot get out of it, since cells of Hifter's forces are deployed throughout the area,” a Syrian fighter says in an audio recording obtained by the observatory. The mercenary urges fellow aspirants to not come to Libya because Turkey has “fooled” those already in the country. “All of us want to return to Syria,” he said, adding that some groups are already preparing to leave Libya.

While the war in Libya has not gone as expected for Turkey, its financial burden continues. Intriguingly, the Turkish public is not prepared to discuss the cost of either the Libyan or the Syrian war. Critical voices from the opposition have yet to mature into comprehensive grouping questioning government policies.

On 2 January, Erdogan obtained parliamentary approval for the military deployment in Libya, soon after signing controversial accords on maritime borders and military cooperation with the Government of National Accord in late November. While Turkey's involvement in Libya has grown increasingly visible, the contractual terms of its military equipment shipments remain unknown. Are they being granted or sold?

Turkish-made equipment such as Kirpi armored vehicles, a product of BMC, and Bayraktar TB2 drones — manufactured by Baykar, a family business of Erdogan's son-in-law Selcuk Bayraktar — have become a crucial element in the Libyan war. While no one thinks they are offered as grants, what the Government of National Accord has given in return remains anybody's guess. The cost of other military activities and the source of the money paid to Syrian fighters remain unknown as well. The government has been tight-lipped on its Libya budget, ignoring written parliamentary questions by the opposition on the issue.

In a December decree, Erdogan set an upper limit of TL 20 million (some \$3 million) for products and services to be provided to friendly and allied countries in 2020, including weapons and ammunition. This limit, however, appears rather irrelevant in terms of the military shipments to Libya, which have included even a Hawk air defense system.

Unal Cevikoz, deputy chair of the main opposition Republican People's Party, submitted a parliamentary question on the issue in December, but the president's office has yet to reply. On 3 April, he submitted another written question, this time to the foreign minister. Cevikoz demands answers on how much Turkey has spent in the Libyan civil war and who are the beneficiaries of that spending, how much the Government of National Accord has paid for equipment such as drones and armored vehicles, how much Turkey has paid to fighters transferred from Syria and what budget funds are used to cover such spending, how many Turkish troops have been deployed in Libya and how many of them have died.

The government has spurned calls for transparency on the Libyan dossier thus far. In the face of questions and criticism, its response has been limited to pointing to Emirati shipments to Hifter's forces and saying that Turkey is doing what it takes to protect its own strategic interests.

Fehim Tastekin is a Turkish journalist and a columnist for Turkey Pulse who previously wrote for Radikal and Hurriyet. He has also been the host of the weekly program "SINIRSIZ," on IMC TV. As an analyst, Tastekin specializes in Turkish foreign policy and Caucasus, Middle East and EU affairs. (AI-Monitor 05.04)

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