Spurring Paytech Innovation in Smaller Developed Markets

Source: Shutterstock

By Oded Salomy, Director of the Payment and Settlement Systems Department, Bank of Israel

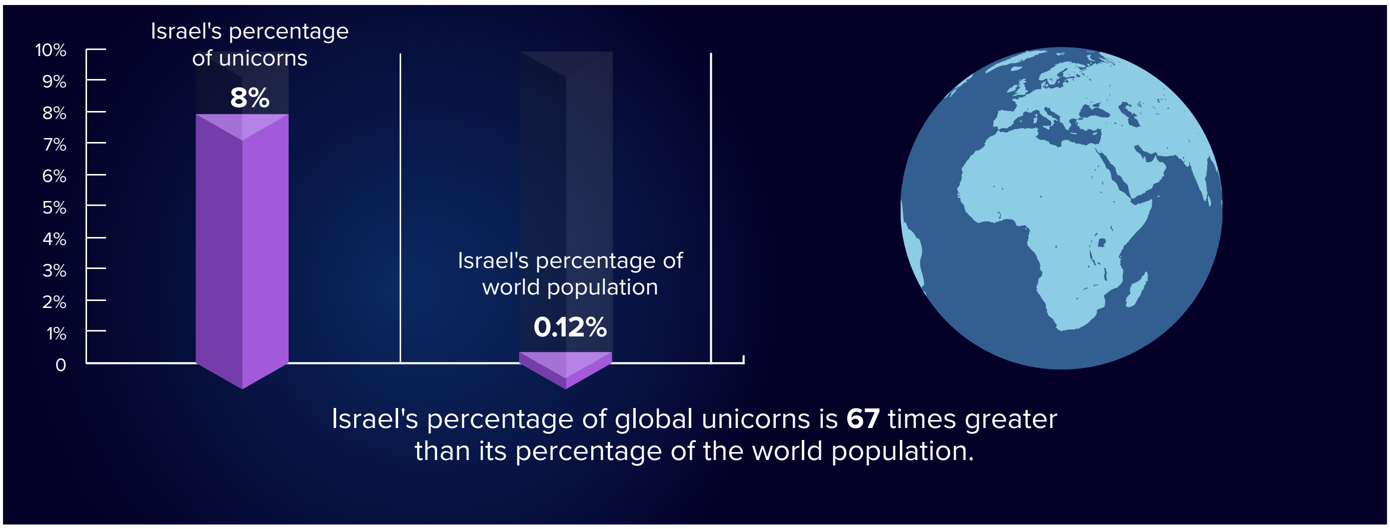
One of the unique challenges faced by regulators of payments and payment systems in smaller but developed markets is ensuring an attractive business case for stakeholders, be they banks, big-techs or Fintechs, as they consider whether to develop propositions for a given domestic market. In many such markets, an additional element exacerbating this challenge is that legacy payment systems and payment methods generally work well, providing high levels of uptime, stability and often reasonable costs and transaction times. Small market size also tends to limit the number of players in the domestic payments space and therefore lowers competition and innovation. In these jurisdictions, as we think about prioritizing our initiatives, we conduct a cost-benefit analysis: What benefit will new Paytech initiatives bring consumers and businesses, and at what cost? What will be the impact on the domestic market in terms of payment system stability, settlement finality and economic cost?

In Israel's market these questions come into special focus. Major global market-moving Paytech initiatives are developed by Israel-based teams, yet many of their innovations are not offered domestically. What measures should we take, if any, and how far should we go, to lower domestic barriers to entry for Paytech firms?

Paytech in the Startup Nation

With only 0.12% of the world's population but 8% of the world's unicorns, Israel enjoys an abundance of local research and development in the high-tech sector. This sector delivers nearly 13% of domestic GDP and 40% of exports. In the late 2000s Israel's active startup scene earned it the nickname "Startup Nation." So many of the early stage companies have grown in recent years that new nicknames have emerged for the country in the venture capital industry—"Scale-up Nation", and in some respects, "Fintech Nation".

Table 1: Global vs. Israeli Unicorns



Source: https://finder.startupnationcentral.org, CB Insights and Bank of Israel calculations

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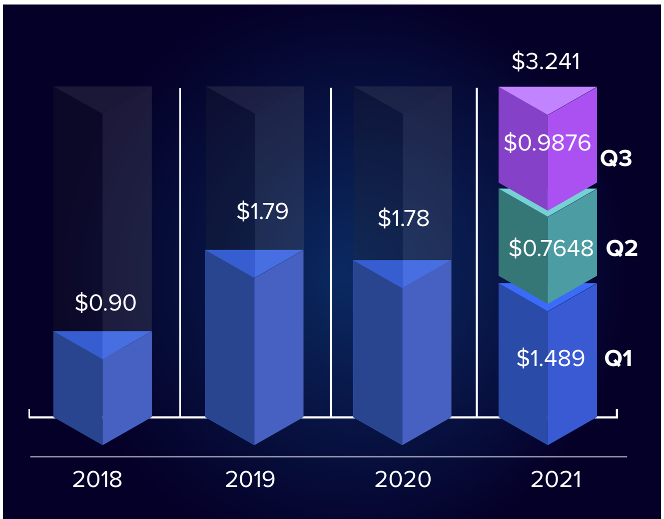
Indeed, domestically developed Fintech and Paytech propositions stand out. The domestic Fintech powerhouse raised US$3.2 billion in the first eight months of 2021 alone and has been delivering impressive Israeli capital-raising growth, including when compared with similar measures in other markets across the world.

Table 2: Annual Fundraising Amount: The Israeli Fintech Industry ($ billion)



Source: https://finder.startupnationcentral.org

The Israel tech ecosystem features 393 multinationals managing local innovation—many of them big-techs working on payment propositions, 197 local tech companies developing payments offerings, and nearly all global Tier 1 banks engaging in local innovation. Eighteen of the country's 65 current unicorns operate in financial technology, with eleven of them delivering solutions focused on payments. Israel has become a Paytech entrepreneur's paradise.

Why do these innovators direct their marketing and sales attention elsewhere, not deeming Israel a natural target market? Reasons abound. Israel is a small market with a population of 9.2 million, and not part of a larger geopolitical region where Fintechs can use the domestic regulatory framework as a basis to passport their licenses to other jurisdictions. The potential domestic market often does not justify a young venture's compliance efforts. Domestic marketing efforts do not easily translate abroad. And domestic Paytech legacy systems in Israel, notwithstanding their being traditional platforms, for years have delivered abundant bespoke local innovation. For decades, domestic legacy platforms in Israel have offered businesses and consumers tailor-made Buy Now Pay Later (BNPL) propositions, long before the term even existed, as well as dynamic fraud management algorithms based on domestic big data, multi-merchant loyalty programs redeemable at the point-of-sale, and rich offline and online capabilities, among other things. That makes it more difficult for new Paytech propositions to compete.

If Domestic Payment Systems Aren't Broken, Why Fix Them?

Similar to other smaller markets that enjoy domestic legacy Paytech innovation, as globalization has progressed, gaps have developed between small domestic and global innovation. Some examples from Israel:

- In the **payment cards** space, even though the domestic market developed mature and stable offline capabilities and highly effective back-end fraud management, rendering cryptographic keys safeguarding data passing between plastic cards and point-of-sale terminals unnecessary, abroad EMV became the fraud management solution of choice. Globally, EMV rapidly became a platform for innovation, enabling Near Field Communication (NFC) technology for contactless payments with cards, and then proximity payments using mobile devices. Internationally, big-tech-driven NFC mobile wallets grew, transforming the consumer payment experience, while Israel found itself stuck with magnetic stripe technology unable to deliver NFC mobile wallets to consumers. That created quite a conundrum in a country where people frequently travel abroad and often act as early adopters.
- In account-to-account payments, platforms delivering **Faster Payments** (also known as Immediate or Instant Payments) began to emerge across the world. Multiple markets were able to attract vendors that work by international standards to develop domestic propositions, while the small size and unique requirements of the Israeli market acted as barriers to entry.
- In **cross-border payments**, Fintechs globally, as well as Israel-based innovators, have been delivering attractive C2C, C2B, B2C and B2B propositions reducing the cost, time for payment, and friction that come with traditional ways of moving money abroad. The Israeli shekel's limited circulation and legacy players' zealous retention of their high profitability from cross-border payments severely limited most Fintech initiatives in this area when considering the domestic market.

These growing gaps highlighted the fact that consumers and businesses in the domestic market are missing out on new offerings. While legacy domestic Paytech innovations may provide unique benefits, in the global economy, locals miss out on Paytech propositions that come only with large global scale.

As regulators, we understand our responsibility not only to ensure the stability of domestic payment systems, but also to examine what factors in our ecosystem can improve their efficiency and efficacy. We seek ways to enable new market entrants' access to our domestic market to deliver new financial benefits to consumers and businesses, including via digital payments and new innovation pathways.

Financial services that begin with Paytech quickly evolve from digital payments to additional areas, such as transaction data-driven underwriting delivering smart credit offerings, super-apps using Paytech customer engagement as a springboard for offering additional products and services, and other offerings yet to be created.

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Cumulative Regulatory Actions to Spur Domestic Paytech Competition and Innovation

In light of the multidisciplinary nature of payments, as well as the multi-sided nature of payment systems involving various types of payment service providers, it is difficult to imagine one regulatory step that can spur Paytech innovation to make a significant national impact even in smaller developed markets. Rather, national market impact generally results from a series of state actions, both as regulatory overseers and operators of domestic payment systems.

In recent years, the Bank of Israel has resolved to lead game-changing initiatives in the payments space. Our intent is not only to close gaps that have emerged between Israel and the global payments scene, but also to proactively lead in areas that are sensible to the domestic market. We seek to make Israel a natural target market for local and global Fintechs, as well as to foster new value added offerings in the domestic payments space by legacy players.

- **RTGS Upgrade**: We are massively upgrading the backbone of our payment systems, the RTGS platform we operate (known by its Hebrew acronym, ZAHAV), to provide multiple innovation-oriented benefits, including readiness for connecting nonbank entities, readiness for deploying ISO 20022 which will deliver data-rich transaction messages, multi-currency capabilities and more.
- **Access to Payment Systems**: Similar to other markets, participants in supervised Israeli payment systems were traditionally the banks or bank subsidiaries. To foster new nonbank market entrants with innovative Paytech propositions, the Bank of Israel has been working closely with all supervised payment systems to provide direct or indirect access to non-bank participants. Depending on the scenario, this process entails review and revision of relevant payment system rules and regulations, processes, technology, financial measures and more.
- **Market Structure**: In collaboration with a variety of government agencies, we oversaw a multi-year process through which the two largest banks in Israel spun off their payment card subsidiaries. The collective of regulators involved believed that, as payments-focused commercial entities, the spun-off companies would deliver new innovation and offerings to consumers and businesses. This move came in the context of a broader ambition to increase the limited number of players in the local market, and thus enhance competition and drive innovation in financial services.
- **New Digital Banks**: Neobanks, also known as challenger banks, deliver significant new financial propositions and payment experiences to customers in many developed markets, but not yet in Israel. One central barrier to entry for new digital banks domestically has been bespoke local requirements that make it necessary to develop costly IT infrastructure. Understanding this challenge, the Ministry of Finance provided significant financial incentives for third parties to build such IT banking infrastructure, enabling new market entrants to use its platform. Its business model is similar to Banking as a Service (BaaS) platforms developed by Fintechs in recent years, but focused on the domestic market. In tandem, the Bank of Israel led efforts to facilitate licensing for new market entrants. As a result, after forty years during which no new retail bank licenses were issued, the business case for launching a new fully digital bank emerged. A new digital bank was founded and licensed; we expect it to come to market in the coming months. One interesting aspect of this venture is that it is funded by an entrepreneur whose financing comes from his ventures in the high-tech space, and the venture's approach to banking is mainly technology-driven. Similarly, separate legislation enabled a new, first-ever credit union in Israel to obtain an initial license from a separate regulator, with a plan to use the same BaaS platform. Additional players are expected. Each of these bank and nonbank entities requires connections to the domestic payment systems in order to function. For the first time in decades, not only is the Bank of Israel connecting new entities to the payment systems we operate, it is also overseeing their connection process to payment systems we supervise. While in some markets this process may be business as usual, we are witnessing new retail banking and payment service providers entering the local market for the first time in most Israelis' lifetimes.
- **"PSD Law"**: Learning from Europe, and working closely with other regulators, we are working collaboratively to legislate an Israeli version of the Payment Services Directive, designed to accomplish multiple goals, including the issuance of licenses to non-bank entities seeking to provide payment initiation. These nonbank entities will leverage the Bank of Israel's recent open banking initiative that enables such entities to connect to banking systems using APIs.
- **Faster Payments**: In account-to-account payments, we led a multi-year initiative that resulted in the launch of a Faster Payments platform by the Bank Settlement Center (known by its Hebrew acronym, MASAV), our national ACH clearinghouse. Similar to Faster Payments in other markets, the platform still isn't widely used. We are reviewing market dynamics and working closely with MASAV to trigger broader adoption of Faster Payments as well as alignment with international standards.
- **NFC**: In the payment cards space, we understood that the liability shift framework that pushed industries abroad to migrate from magnetic stripe to EMV technology won't work, because local tech kept fraud levels low notwithstanding the use of old-school magnetic stripes. We established a timeline with milestones and dates after which acquirers may no longer accept transaction messages based on magnetic stripe technology. We worked closely with local technology vendors, the national switch, the global schemes, issuers, issuer processors and merchant acquirers to agree on the pace and scope of migration. Within two years, approximately 70% of terminals migrated to being not only EMV compliant but also NFC-enabled, and 50% of all terminals were active, delivering live EMV or NFC transactions. As a result, in the last year alone, seven NFC-driven mobile wallets have launched, including one global big-tech wallet, with more expected in the next twelve months. By July of next year we expect to complete migration of nearly 100% of domestic terminals.

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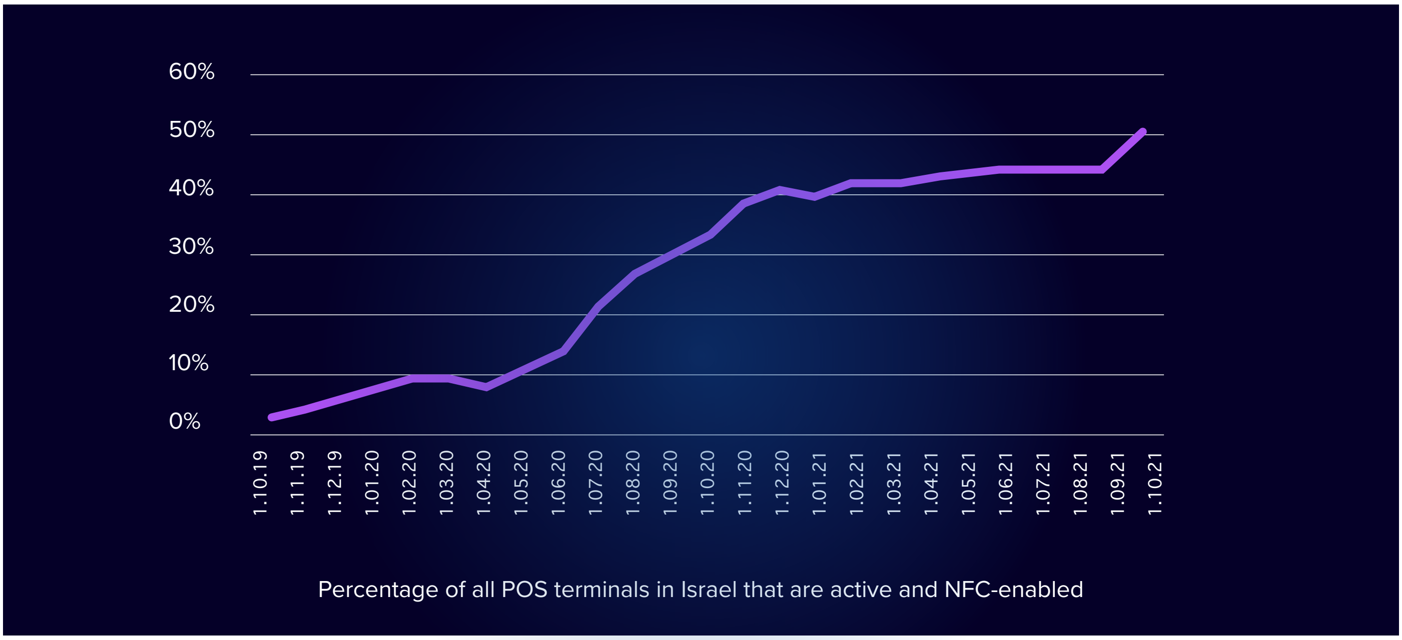
Table 3: Active NFC-Enabled Point-of-Sale Terminals in Israel, 2019–2021 (%)



- **Transitioning to Daily Settlement**: The payment cards market in Israel has penetrated 68% of personal consumption expenditure (PCE), excluding housing, cars and amounts paid to NGOs. This measure places Israel among the top markets globally. The majority of its card volumes are deferred debit, similar to the UK's charge cards, where issuers charge cardholders their entire balance automatically once per month. As a result, when the national payment cards switch was designed decades ago, it provided settlement of funds once per month between card issuers and merchant acquirers. While mathematically sensible, this setup creates significant settlement risk in the domestic cards payment system during the period from one monthly settlement date to the next. This exposure makes it difficult for the system to accept smaller market entrants as card issuers, as they may not have the financial soundness to provide backing for such exposure. When viewed internationally, this barrier to entry is unique, as almost all markets provide daily settlement of funds between card issuers and acquirers. Hence, working closely with other regulators as well as all domestic stakeholders, the Bank of Israel oversaw a transition to daily settlement, implemented by the national payment card switch, Automated Banking Services (known by its Hebrew acronym, SHVA), which was completed in July 2021.
- **Account Switching**: Aligning with pro-competition initiatives nationwide, last month the Bank of Israel announced the launch of rapid current account changing. This service, available online, enables consumers to switch current accounts between banks within seven business days, conveniently, securely, at no cost and includes a "follow me" service, including with respect to checks, ACH transfers, and other activities using domestic payments systems.
- **Digital Checks**: As a market with continued significant volumes of paper-based checks, we understand the value of "free credit" provided by this instrument, with check writers able to offer their recipients post-dated checks in a variety of use cases. While seeking to preserve this benefit, we launched a public consultation and stakeholder engagement through which we plan to ultimately lead to the migration of paper-based checks to digital format. We anticipate this change will enable payment providers to offer their users mobile payments via check, in addition to other means of payment.
- In **cross-border payments**, we have been engaging with multiple players that are active in other markets, to help them enter the domestic market. In some instances we work with them to explain the local market structure, market size and opportunity, and in others to provide regulatory clarity on licensing and related issues.
- **CBDC**: Contemplating the future of payments in Israel, similar to central banks across the globe we embarked on a long journey of researching Central Bank Digital Currencies (CBDCs), publishing and seeking public comment on an initial model for a digital shekel. Should we proceed with the issuance of CBDC, technology companies could be provided with multiple new opportunities to enter the payments space.
- **Cryptocurrencies and Stablecoins**: Cognizant of the significant blockchain and cryptocurrency communities that have emerged domestically, we are researching the opportunities and risks that distributed ledger technology, cryptocurrencies and stablecoins may present for our payment systems in particular, and the economy in general.

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- **National Identity Database**: A central challenge faced by new market entrants in the financial space is the ability to onboard new customers while complying with KYC and AML requirements, as well as authenticating them in the course of individual transactions. We are closely collaborating with other regulators to establish a roadmap for a national identity database that will help Fintechs meet this challenge more easily.
- **Big Data**: As the COVID-19 pandemic set in and the Bank of Israel's monetary policymakers understood the immediate economic challenges that may result, our need for immediate nowcasting accelerated, seeking the ability to monitor same-day economic changes and analyze the fiscal impact of government initiatives. We took immediate action to collect real-time data from retail payment systems and pass them on to decision-makers. Our award-winning initiative not only yielded insights for the COVID-19 era, but also yielded an understanding of the meaning and usefulness of the robust high frequency transaction data that resides in domestic payment systems. We are taking steps to develop these capabilities further, both in-house and in cooperation with external parties, which could at some future point provide technology companies with new business opportunities.

Our initiatives in the payments space include ongoing extensive consultation with multiple domestic ecosystem stakeholders, through a series of formal and informal engagements, as well as other central banks and external experts. The multi-sided nature of payment systems makes it necessary to secure the participants' deliberate desire to collaborate.

Smaller Markets Can Offer Attractive Starting Points for New Paytech Initiatives

As Paytech developers consider their go-to-market strategy, they may consider the advantages of testing their product-market fit in smaller developed markets before attempting a high stakes rollout in larger economies. Smaller markets enable entrepreneurs to test and reiterate quickly.

Israel's annual GDP of US$447 billion ranks it 30th out of 213 countries across the globe. As Paytech entrepreneurs innovate for the benefit of other markets, our cumulative regulatory actions aspire to make our domestic market attractive enough for them to innovate for Israelis as well. And we welcome cross-border dialogue and collaboration from central banks and payment regulators in other markets.

Bank of Israel