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Treasury Report: Airwallex and Brex – A Deep Dive

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1. Treasury Foundations

Treasury is the financial nerve center of an organization, responsible for managing liquidity, financial risks, and funding to ensure the company can meet its obligations and strategize for growth. This section lays the groundwork with key definitions and functions of treasury, approaches to liquidity management and cash forecasting, foreign exchange (FX) risk practices, and the key performance indicators (KPIs) used to gauge treasury success.

1.1 Treasury's Role and Core Functions

In corporate finance, the treasury department is typically a **cost center** that provides essential financial services to the organization [1]. Its overarching goal is to **ensure the right amount of cash is in the right place at the right time** to meet obligations and optimize returns. Core treasury functions include:

- **Cash and Liquidity Management:** Ensuring the company has sufficient liquid funds for operations and investments, while minimizing idle cash. This involves managing bank accounts, short-term investments, and facilities like credit lines to cover cash needs [1]. Liquidity management also means avoiding surplus cash sitting idle by investing it or returning it to shareholders when appropriate.
- **Funding and Capital Management:** Determining how to finance the company's operations and growth (debt, equity, internal cash). Treasury secures debt financing, manages bond issuances or credit facilities, and plans for capital needs. It works closely with the CFO on capital structure decisions.
- **Treasury Risk Management:** Identifying and mitigating financial risks, notably **foreign exchange (FX) risk**, interest rate risk, and counterparty credit risk. Treasurers use hedging instruments (for FX, interest rates, commodities) to protect the company's financial results from market volatility [2] [1]. They also manage **operational and regulatory risk**, ensuring compliance with financial regulations and internal controls.
- **Banking Relationships:** Managing the company's relationships with banks and financial service providers. Treasury negotiates bank fees, service quality, and access to banking products. Strong bank relationship management can reduce costs and improve service reliability [3].
- **Payments and Transaction Services:** Overseeing efficient processing of incoming and outgoing payments. Treasury often implements controls and systems for secure, cost-effective payment

processing (e.g. ACH, wires, card payments) and may centralize these into a **payment factory** for efficiency.

- **Regulatory Compliance:** Ensuring treasury operations comply with relevant financial regulations (such as anti-money laundering, sanction screening, and financial reporting standards). Treasury must also adhere to **regulatory risk management**, like maintaining capital or liquidity ratios if applicable [1].

These functions illustrate treasury's dual mandate: maintain financial stability (liquidity and risk control) and contribute to strategic value (cost savings, financial planning).

1.2 Liquidity Management

Liquidity management is the practice of making sure the organization can meet its cash obligations at all times, while optimizing the use of cash. Key aspects include cash positioning, short-term investing, and using credit facilities prudently. Treasurers will monitor daily cash balances, often via a **cash position report**, and decide if excess cash should be invested or if funding is needed for a shortfall.

A foundational liquidity tool is **cash concentration or pooling**, where funds from various accounts are centralized. For example, in a **zero-balance account (ZBA)** system, subsidiary accounts sweep excess cash into a master account daily, so that each sub-account ends the day at zero – the master account provides or absorbs liquidity as needed [4] [5]. Alternatively, companies may use **notional pooling**, which virtually combines balances across accounts to offset positives and negatives without physical transfers (banks calculate interest on the net balance) [6]. Cash pooling, whether physical or notional, **consolidates a company's cash** to improve visibility and *optimize interest* – reducing borrowing costs by offsetting cash deficits with surpluses elsewhere and increasing interest income on net balances [7] [8].

Effective liquidity management yields benefits such as **improved cash flow control, higher interest income on consolidated balances, cost savings on bank fees**, and greater flexibility in funding operations [9] [10]. Treasurers also maintain a **funding buffer** (a cushion of cash or credit availability) to handle unexpected needs. Liquidity metrics (discussed in KPIs below) track how well liquidity is managed.

1.3 Cash Forecasting and Planning

Cash forecasting is the process of projecting future cash inflows and outflows over various time horizons (short-term weekly/daily forecasts, medium-term 3-6 month forecasts, and long-term 1-2 year forecasts). Accurate cash forecasts inform management about upcoming liquidity needs or surpluses so they can plan financing or investments accordingly.

Treasurers typically gather input from across the business (accounts receivable for incoming customer payments, accounts payable for outgoing, tax and capital expenditure plans, etc.) to compile the forecast. They often use statistical models or treasury management systems to refine accuracy. A common measure of forecast quality is the **forecast error** – e.g., percentage deviation of forecasted cash from actual cash – which treasury strives to minimize [11] [12].

Reliable forecasting allows treasury to **avoid cash crunches** (by arranging credit or adjusting spending if a shortfall is projected) and to **invest excess cash** optimally if a surplus is expected. It also underpins strategic decisions like timing dividend payments or share buybacks, scheduling debt issuance or repayment, and calibrating the **funding buffer** mentioned above. Leading practice is to continuously

improve forecast accuracy (sometimes tracked as a KPI per business unit) and to shorten the cycle (forecasting in real-time or intra-day as technology allows – see Section 5.2 on real-time liquidity).

1.4 Foreign Exchange (FX) Risk Management

For internationally active companies, **FX risk management** is a critical treasury function. FX risk (also called currency risk) arises from fluctuations in exchange rates that can affect the value of cash flows, revenues, costs, or balance sheet items denominated in foreign currencies. There are typically three types of FX exposure:

- **Transaction exposure:** arises from specific cash flows in foreign currency, such as an export sale or import purchase. Treasurers hedge these with forward contracts, options, or other derivatives to lock in costs or revenues in home currency.
- **Translation exposure:** accounting impact when consolidating financial statements of foreign subsidiaries (e.g., converting a subsidiary's balance sheet into the parent's reporting currency can create gains/losses due to FX moves). These are often managed via balance sheet hedging (e.g., borrowing in the foreign currency to offset net asset exposure).
- **Economic (operating) exposure:** longer-term risk that currency shifts affect a company's competitive position (harder to hedge with financial instruments, often addressed via pricing or sourcing strategy).

Treasurers use various tools to manage FX risk: **forward contracts** to lock future rates, **options** for flexible protection with upside potential, and sometimes more complex instruments like swaps. A key goal is to **reduce earnings volatility** from currency movements. Many firms set an FX policy that defines hedging targets (e.g., hedge 80% of forecasted exposures 6 months out) and track **hedge ratios** and **hedging effectiveness** as performance measures [13] [14]. Modern treasury systems and even AI tools can help optimize hedging strategies by analyzing large datasets (e.g., historical and forecasted rates) to recommend the best hedging actions [15].

FX risk management also involves optimizing the timing of conversions (holding foreign currency when rates are favorable or using multi-currency accounts to naturally hedge expenses). **Multi-currency liquidity** solutions, like those offered by Airwallex (see Section 2), enable companies to *collect, hold, and pay* in foreign currencies, reducing forced conversions at unfavorable rates. The treasury must also ensure compliance with local currency regulations (some countries restrict currency movements or mandate documentation, etc.).

1.5 Key Treasury KPIs and Metrics

To demonstrate its value and efficiency, treasury uses **Key Performance Indicators (KPIs)** that quantify how well it is managing cash, risk, and operations. Common treasury KPIs include [16] [17]:

- **Cash Visibility (%):** The proportion of the company's cash balances worldwide that treasury can see in real-time. Higher is better – near 100% visibility means no "blind spots" in accounts.
- **Cash Balance and Liquidity Ratios:** For example, **liquidity available** (total cash and undrawn credit lines) and **free cash flow**. Treasurers track these to ensure sufficient liquidity. A related KPI is **funding buffer** (excess cash over required minimum) [18].
- **Cash Flow Forecast Accuracy:** Often measured as a percentage error. e.g., "percentage forecast error by business unit" – this gauges the quality of cash forecasting [11]. Smaller error = more reliable planning.

- **Days Liquidity or Cash Conversion Cycle:** How long the company's cash is tied up in operations (receivables + inventory – payables in days). Treasury may monitor this in partnership with finance/working capital teams to optimize working capital.
- **Interest Cost and Investment Yield: Cost of funds** (average interest rate on debt) and comparison to benchmarks, as well as yield on short-term investments. Treasury aims to minimize cost of funds and maximize safe investment returns [18].
- **Hedging Effectiveness:** How well the FX or interest rate hedges perform relative to the exposure. **Hedge ratio** (portion of exposure hedged) and **retrospective hedge effectiveness** (e.g., actual variability reduced by hedges) are tracked [13].
- **Debt Metrics:** If applicable, metrics like average debt maturity, interest coverage, or leverage ratios might be monitored by treasury for corporate finance health.
- **Operational Efficiency:** KPIs such as **percentage of payments processed STP (straight-through processing)**, i.e., without manual intervention, and **time to confirm deals** (e.g., how quickly FX trades are confirmed with counterparties) [14]. A high STP rate and fast deal confirmations indicate a well-automated treasury. **Automation rate** – the share of treasury processes that are automated – is increasingly measured [19]. Low error rates and minimal manual adjustments are signs of efficiency.
- **Bank Relationship Metrics:** e.g., **bank fees as % of total transaction volume**, number of banking partners, or service quality scores for banks [3]. Treasury tracks fees to control costs and may report savings from bank fee optimizations [20].

Modern treasurers select a handful of KPIs most relevant to the company's situation (cash-rich companies might focus on investment returns and cash deployment, whereas highly leveraged firms focus on liquidity and risk metrics) [21]. Through 2025 and beyond, there is an emphasis on **real-time metrics** – for example, real-time cash visibility and forecast updates – reflecting the treasury's adoption of technology for instantaneous data [22]. Ultimately, these KPIs help communicate treasury's performance to the C-suite and support strategic decisions by quantifying how well cash and risks are managed.

2. Airwallex Treasury

Airwallex is a fintech platform founded in 2015 that has built a **global financial infrastructure** for businesses. Its core offerings – multi-currency accounts, international payments, FX services, and card issuing – effectively serve as a **treasury solution for companies operating globally**. In this section, we examine Airwallex's approach to treasury management: how it enables multi-currency liquidity management, its FX operations and risk handling, how it navigates regulatory compliance across jurisdictions, and its strategy of embedded finance (providing its treasury capabilities as a service to other platforms).

2.1 Multi-Currency Liquidity and Global Accounts

A standout feature of Airwallex is its **multi-currency wallet** infrastructure. Customers can open local accounts in various countries within the Airwallex platform, allowing them to **collect, hold, and spend in 20+ currencies** as if they had a local bank account in each region [23] [24]. This directly addresses a common treasury pain point: companies expanding internationally traditionally had to establish numerous local bank accounts (a tedious process taking weeks per account) to avoid excessive foreign exchange and transfer fees. Airwallex simplifies this – according to its Director of Treasury, **opening a new locally domiciled account is done with a few clicks**, versus the weeks or months via traditional banks [25] [26].

By holding balances in multiple currencies, **businesses gain flexibility** in managing currency positions. For instance, a firm can collect revenue in USD, EUR, AUD, etc., and **decide when to convert** those funds based on market conditions or use them to pay same-currency expenses, thus **avoiding unnecessary FX conversions** [27] [28]. This capability essentially **creates an in-house global cash pool** for clients: funds from different countries are consolidated within Airwallex's platform. Treasurers can then allocate cash optimally – either keep currency A to fund local operations or convert to currency B when rates are favorable. Airwallex even offers features like **locking in FX rates for future transactions** on 1,000+ currency pairs [29], helping customers mitigate FX volatility on anticipated needs.

From Airwallex's own treasury perspective, providing multi-currency accounts means it must **maintain liquidity in many jurisdictions and currencies**. The company holds balances at partner banks around the world and uses its network to route payments locally. It boasts local collection capabilities in 60+ countries and payouts in 120+ countries, using local clearing in many of them [30] [31]. Essentially, Airwallex's treasury has established a **global banking network** – so their customers don't have to. Bart Verweij (Airwallex's Treasury Director) noted that previously he spent years building an international banking network at a prior company; Airwallex customers get that instantly, avoiding high fees (e.g. $30–40 SWIFT fees or poor exchange rates) by using local accounts for both payables and receivables [32] [33].

Another treasury benefit Airwallex provides is **multi-entity management** from one dashboard. For companies with subsidiaries, treasurers can oversee all accounts globally in the Airwallex interface, eliminating the need to juggle multiple banking portals and security tokens [34]. This centralization improves cash visibility and control (aligning with best practices of cash pooling and centralized treasury).

Airwallex's multi-currency infrastructure effectively turns the complex web of global accounts into a **single, consolidated treasury view**. This resonates with the future vision Verweij describes: *"having a single view across all accounts worldwide, with the ability to move funds instantly where they're needed"* [35]. In summary, Airwallex's platform tackles the liquidity fragmentation problem by **globally unifying cash management** for businesses – a capability that traditional bank setups struggle to match in speed and ease.

2.2 Foreign Exchange Operations and Risk Management

Foreign exchange is at the heart of Airwallex's value proposition. The platform provides **FX conversion at interbank rates plus a small markup** (often ~0.5% for standard plans) which is significantly cheaper than traditional banks' spreads [36]. Customers can convert funds on-demand in their wallet or set up automatic FX transfers. By offering *near-interbank rates*, Airwallex enables treasurers to save on conversion costs, which directly improves the cost efficiency of cross-border operations.

Airwallex's FX operation goes beyond simple conversion. It offers tools to manage FX risk proactively: as mentioned, clients can **lock in exchange rates** for future payments, a form of hedging. While details are not fully public, this suggests Airwallex may provide forward contracts or guaranteed rates for a period, letting customers secure a rate for budgeting purposes [29]. For example, if a customer knows they must pay a supplier in 3 months, Airwallex could allow them to secure today's rate for that future payment, thereby eliminating uncertainty. This is essentially the fintech delivering **treasury risk management as a service**.

Internally, Airwallex's treasury likely manages a **large FX book** – aggregating client conversions and perhaps netting exposures. Because they have a global client base doing buy and sell in many currency

pairs, Airwallex can net some flows internally (one client's USD->EUR needs offset another's EUR->USD). This internal netting reduces how much Airwallex needs to trade in the external FX market, which lowers cost. When it does trade externally, it likely executes with partner banks or liquidity providers at interbank rates, passing on savings to customers and taking a small margin. In effect, Airwallex plays the role of an in-house bank for its clients' FX needs.

Another aspect of FX operations is **transactional FX automation** – Airwallex's API allows businesses to automate FX conversions and integrate currency quotes into their applications [37]. This level of integration means treasury teams can programmatically manage FX: for instance, automatically convert all incoming EUR to USD every evening, or vice versa, based on rules. It reduces manual work and speeds up response to FX rate movements.

From a risk standpoint, Airwallex must also manage **FX exposure** because it holds multi-currency balances for clients. They likely adhere to strict policies not to speculate on FX; any exposure from providing locked rates or holding client funds is probably hedged. Since Airwallex holds customer funds (segregated) across currencies, they must ensure that if a currency moves sharply, clients' funds retain value. Given Airwallex's rapid growth, the risk management framework would involve setting **limits on open currency positions** and using derivatives to hedge any material net exposures.

In summary, Airwallex's treasury operation treats FX as both a service for clients and a risk to manage internally. The company's tech-forward approach – providing API-driven FX and competitive rates – transforms FX from a headache (for many SMEs it's historically a "treasurer's headache" as Airwallex calls it) into a seamless part of doing business globally [38] [39]. This is a prime example of a fintech solving a classic treasury problem with technology and scale.

2.3 Regulatory Compliance and Safeguarding Funds

Operating a global treasury platform requires meticulous **regulatory compliance**, and Airwallex invests heavily in this area. The company holds **over 60 financial licenses worldwide** [40] – spanning regulators in Australia (where it's regulated by ASIC and holds an Australian Financial Services License), the UK (FCA e-money license), the EU (via licenses in Lithuania for EU passporting), the US (money transmitter licenses in most states), Hong Kong, Singapore, and many more [41] [42]. These licenses authorize Airwallex to handle payments and foreign exchange in each jurisdiction, ensuring it operates legally and customers' funds are protected.

One advantage Airwallex touts is that clients and partners can **leverage its regulatory footprint** instead of securing their own licenses in every country [43]. For example, a marketplace expanding globally can use Airwallex's infrastructure under Airwallex's licenses, greatly simplifying compliance. This is part of Airwallex's embedded finance strategy (discussed next) – essentially providing a *compliance wrapper* so clients focus on business, not regulatory filings.

Airwallex also complies with stringent **security and risk standards**. It adheres to *world-class security frameworks like PCI-DSS, SOC 1 and SOC 2, ISO 27001*, etc., to protect transactions and data [40]. For financial crime compliance, Airwallex has robust **Know Your Customer (KYC)** and **Anti-Money Laundering (AML)** programs. An Airwallex compliance article notes the importance of verifying merchants, monitoring transactions for fraud and money laundering, and adapting to each region's rules (for instance, EU's GDPR for data privacy, US's 1099-K tax reporting for marketplaces, etc.) [44] [45]. The platform uses a combination of automated checks and risk-based controls to prevent illicit activity, which is crucial to maintain its licenses.

In terms of **funds safeguarding**, since Airwallex is not a bank (it cannot use deposits for lending), it keeps client money in segregated accounts with large banks. It has partnered with leading banks to hold these funds, and it discloses that *"Your funds are always safeguarded in line with local regulations where Airwallex operates"*, meaning customer balances are protected and would be returned even if Airwallex were to encounter issues [46]. In some regions, they partner with insured banks (e.g., in the US, Airwallex partners with Evolve Bank & Trust for certain services, and the Airwallex Borderless Card in the US is issued via Community Federal Savings Bank, showing how they integrate with the banking system for compliance) [47].

Airwallex's heavy emphasis on compliance is both a necessity and a competitive advantage. It enables the company to operate in tightly regulated markets and gain customer trust. As a result, Airwallex markets itself as *"your trusted partner for marketplace compliance"*, highlighting that it simplifies global expansion by handling the complex web of regulatory requirements behind the scenes [48] [49]. In practice, this means a treasurer using Airwallex can be confident that while they move money across borders, the appropriate KYC/AML, reporting, and licensing aspects are managed by Airwallex.

2.4 Embedded Finance Strategy

Airwallex not only uses its treasury capabilities for its own operations, but also offers them as **embedded finance APIs** for other platforms. This strategy essentially turns Airwallex's treasury infrastructure into a product that others can plug into – a *Banking-as-a-Service* model for global treasury.

For example, Airwallex's **Global Treasury API** allows software platforms, marketplaces, or even other fintechs to embed multi-currency accounts, FX, and international payment capabilities into their own offerings [50] [51]. A SaaS platform could thereby let its users collect payments worldwide and manage funds without building any banking connectivity themselves. Airwallex provides the backend: the licenses, banking network, FX engine, etc., accessible via API.

This strategy has two big implications:

1. **Revenue Diversification:** Airwallex can monetize its treasury infrastructure by charging other companies fees for using its APIs (be it transaction fees, FX markups, or SaaS-like fees). For instance, Airwallex notes partners can earn revenue themselves from markups on FX or payment fees passed through to end-users [52]. By powering other fintechs (including some notable ones like Brex, see Section 4), Airwallex taps into B2B2C or B2B2B flows, extending its reach far beyond its direct customer base.
2. **Scaling via Partnerships:** Instead of directly acquiring millions of small business customers one by one, Airwallex can partner with platforms that already have those customers. Each partnership essentially outsources part of Airwallex's customer acquisition. This **ecosystem approach** is evident in Airwallex's rapid growth: as of 2024, they emphasize assembling a "rapidly growing ecosystem of customers and partners" [53]. It validates Airwallex's position as a *"catalyzing force in global money movement infrastructure"* [53].

A concrete example of embedded finance in action is Airwallex's partnership with **Travel platforms** or **eCommerce SaaS**: these partners use Airwallex to offer their merchants financial services like global collection accounts, thereby improving the partner's value proposition while Airwallex earns fees behind the scenes [48] [54].

Airwallex's embedded finance offering inherently includes built-in compliance (partners leverage those 60+ licenses), which is a huge draw. As noted in one of their compliance articles, by integrating with a provider like Airwallex, marketplaces can avoid the *"time-consuming, costly process of securing and*

maintaining licenses independently", entering new markets faster [55] [56]. This essentially makes Airwallex a **treasury outsourcer** for other companies – handling payments, FX, compliance, and allowing partners to focus on their core product.

From a treasury perspective, Airwallex's own treasury team must ensure the platform can handle large volumes from partners, maintain **liquidity to settle transactions across the globe in real-time**, and scale risk management to cover indirect clients. The fact that Airwallex has attracted major partners (for instance, **Brex uses Airwallex for international expansion**, as we'll see) indicates that its treasury infrastructure is robust and trusted.

In summary, Airwallex's embedded finance strategy is to be the **invisible treasury backbone** for modern businesses. This aligns with Bart Verweij's vision of Airwallex *"becoming the central platform for treasury management"*, consolidating accounts and enabling instant funds movement globally [35]. By offering its treasury capabilities as a service, Airwallex not only enhances its own scale but also pushes the industry toward more integrated, tech-driven treasury solutions.

Airwallex Treasury Takeaways – "Toolkit" Summary: Airwallex demonstrates how a fintech can solve classic treasury challenges with a tech platform: - *Local account opening:* Instantly open bank accounts in new countries to avoid banking bureaucracy [57]. - *Multi-currency liquidity:* Hold and manage 20+ currencies in one wallet, timing FX conversions strategically [27]. - *Integrated FX risk management:* Access interbank FX rates and hedge features (rate locking) to manage currency exposure [28]. - *Regulatory leverage:* Operate under Airwallex's 60+ licenses to expand globally without own licenses [58]. - *Embedded treasury:* Use Airwallex APIs to embed accounts, payments, FX into your product – essentially outsourcing the heavy lift of global treasury infrastructure [43]. - *Centralized control:* Achieve single-dashboard visibility over global funds, improving control and reducing reliance on fragmented banking systems [34].

Airwallex's approach illustrates a **fintech treasury** ethos: global by default, API-first, and compliance-heavy, turning what used to be a headache for treasurers into a competitive advantage.

3. Brex Treasury

Brex is a fintech company founded in 2017, known initially for its corporate credit card tailored to startups. Over time, Brex has evolved into a **unified finance platform** offering corporate cards, expense management, and business accounts (including cash management and yield-generating options). In this section, we explore Brex's treasury management practices and products: how its card business creates unique liquidity dynamics, how Brex handles settlement floats, how it offers treasury investment services to clients, and how credit risk is integrated into its model.

3.1 Card-Based Liquidity and Spend Management

Brex made its name by providing **corporate charge cards** to startups that traditionally couldn't access high-limit credit cards. These cards are *"charge"* cards (balances are paid in full, not revolved) with limits determined by a company's cash flows and backing rather than personal credit. This model has treasury implications both for Brex and its customers:

For **customers (businesses)**, Brex cards offer a form of **short-term liquidity or working capital**. Instead of paying expenses directly out of their bank account each day, companies can put spend on the Brex card and typically have a statement cycle (historically up to 30 days) before payment is due. This effectively gives a **cash float** – freeing up cash in the short term. Startups with investor cash can

preserve liquidity for a few extra weeks by using the card for expenses and paying once a month. In treasury terms, the Brex card acts as a **liquidity buffer** for customers, improving cash conversion cycles (payables are extended to the statement date).

For **Brex's own treasury**, issuing cards means Brex is fronting the money to merchants on behalf of customers, then collecting from customers later. This creates **accounts receivable (card receivables)** on Brex's balance sheet and requires financing. When a Brex cardholder swipes their card, the merchant gets paid (by the card network) usually within a day or two; Brex must settle that amount through the Mastercard/Visa network to the merchant's bank. Brex then waits for the customer to pay their card bill. During that waiting period, Brex's treasury must ensure funds are available to cover all card transactions that have been made but not yet repaid by customers – this is the **settlement float**. The float can be sizable, especially if statement cycles are long and transaction volumes high.

Brex originally allowed monthly payment cycles, meaning roughly 30 days of float. Later, it introduced daily or more frequent repayments for some customers, partly to manage risk. Nonetheless, Brex's treasury actively manages this float through a combination of **working capital facilities and securitization** (see 3.2). Brex does not operate like a bank that can use deposits to fund loans; instead it must raise or allocate capital to fund card receivables.

From a **spend management** perspective, Brex integrates the card with software that gives companies real-time visibility and control over expenses. This combination of card + software doesn't directly affect Brex's treasury, but it makes the product sticky, leading to more card volume (and thus interchange revenue for Brex's treasury to capture). The card's interchange fee (around 1-3% from merchants) is a primary revenue source which Brex's treasury counts on as cash inflow.

It's worth noting Brex has expanded to serve larger companies with global operations. To do so, it needed global card capabilities. Instead of getting its own licenses abroad, Brex **partnered with Airwallex** to support its global card program with local collections and reimbursements [59]. In practice, this means when a Brex user has international spending or needs to pay foreign employees' expenses, Airwallex's infrastructure helps handle those local currency flows. Brex leverages Airwallex's 50+ licenses and local payment network to settle transactions in local currencies and then consolidate back to the Brex account [59] [60]. This partnership highlights Brex's strategy to **outsource certain treasury functions** (like multi-currency handling) to a specialist, allowing Brex to focus on the core platform and credit underwriting.

In summary, Brex's card business intertwines with treasury in that **credit provision = liquidity provision** to customers, and it necessitates robust **funding management** by Brex. The company's success in cards has required it to innovate in treasury operations—particularly how to finance the receivables and manage credit risk, discussed next.

3.2 Settlement Float Management and Funding Strategy

Managing the settlement float on card transactions is a critical part of Brex's treasury operations. Whenever there's a gap between when Brex pays merchants and when customers pay Brex, Brex must fund that gap. There are a few mechanisms Brex uses:

- **Credit Facilities (Warehouse Lines):** Brex secures lines of credit from banks or lenders specifically to fund card receivables. These are often referred to as *warehouse facilities*. Brex borrows money on a short-term basis to pay off the daily card settlements, then repays the borrowing when cardholders pay their statements. Such facilities carry interest cost (affecting

Brex's P&L), but are more efficient than using Brex's own cash [61] [62]. Brex reportedly has multiple warehouse credit lines.

- **Securitization:** Brex packages its card receivables into asset-backed securities and sells them to institutional investors. By "securitizing" the receivables, Brex converts the illiquid customer IOUs into immediate cash from investors. Brex completed its third securitization in early 2024, issuing ~$260 million in notes backed by its card receivables [63]. Notably, these securities achieved a AA rating from Kroll Bond Rating Agency [64] – a strong rating reflecting the solid credit performance of Brex's portfolio. This high rating means Brex can raise funds at a relatively low interest rate, thereby lowering its cost of capital [65] [66]. Securitization provides diversification of funding and usually longer-term financing than revolving credit lines.
- **Using Cash (Equity Capital):** Brex could choose to use its own cash (from equity funding) to fund some receivables. However, this is considered the least efficient method, as cash (especially for a growth-stage fintech) is precious for other investments [61]. Brex's strategy has been to minimize use of its own cash by leveraging debt funding as above.

Brex's treasury manages these funding sources to ensure **liquidity is always available to meet settlement obligations**. A key metric they likely monitor is the **advance rate** on credit facilities – i.e., what percentage of receivables value a lender will fund. Any remainder requires Brex equity ("skin in the game"). Through securitizations and multiple lenders, Brex ensures it's not overly reliant on a single source (reducing counterparty risk) [67] [68]. In fact, Brex highlights *capital diversification* as a reason for securitization – it broadens the investor base and reduces dependency on any one funding channel [69].

Efficient float management also means optimizing **cost of funds**. Achieving a AA rating on securitized notes was a big win – it directly led to a lower interest rate for Brex's borrowings [65]. Lower funding costs enable Brex to invest more in product growth or offer better rewards to customers, etc., making it more competitive. This demonstrates a sophisticated treasury mindset: good credit risk outcomes (low losses on the card portfolio) translate into tangible financial benefits (cheaper capital) [65].

Another treasury aspect is **liquidity risk management** during crises. A prime example was the March 2023 Silicon Valley Bank (SVB) collapse, which triggered panic among startups. Brex's response was a treasury feat: it *"acted quickly to increase its FDIC insurance (coverage for customer deposits), open thousands of accounts for impacted customers over a weekend, and ensure credit card limits were not impacted during this emergency"* [70]. Brex even established a $1 billion bridge loan program to help customers make payroll if their funds were locked at SVB [71]. This underscores that Brex's treasury is not only managing its own liquidity but also stepping in to support customer liquidity in a crunch. By immediately increasing FDIC insurance (Brex's sweep network to $6 million coverage) [72], Brex attracted a wave of deposits from startups seeking safety after SVB. Those deposits likely swelled Brex's client cash balances overnight, which Brex's treasury then had to allocate across partner banks (for FDIC coverage) and money market funds. The agility to scale that in one weekend is significant.

In summary, Brex's float management revolves around **securing sufficient, low-cost funding** for its card receivables and being nimble in the face of market stress. The combination of warehouse lines, securitizations, and emergency programs reveals a treasury function as critical to Brex's operations as any engineering team – keeping the lifeblood of transactions flowing under all conditions.

3.3 Treasury Investment and Yield Offerings

Brex not only manages its own liquidity; it also provides **treasury services to its customers** in the form of investment options for their excess cash. Branded originally as **Brex Cash** and now simply the Brex

business account, Brex's offering includes multiple sub-accounts that parallel treasury management for clients [73] [74]:

- A **Business Checking Account** (operational account for daily transactions, provided in partnership with a bank, Column N.A.) [75].
- A **Treasury Account** that earns yield by investing funds in a government money market fund (MMF) [76].
- A **Cash Management (Vault) Account** that spreads funds across a network of banks for expanded FDIC insurance (up to $6 million) [77].

Brex Treasury LLC, a FINRA-registered broker-dealer, facilitates the investment of client funds in the **Dreyfus Government Cash Management Fund (DGVXX)** [76]. This is a low-risk MMF that invests in government securities. As of mid-2025, the seven-day yield on that fund was around 4.22% [76]. Customers can opt to put idle cash into this treasury account to **earn a return while keeping funds liquid** (Brex touts same-day or same-hour liquidity for withdrawals) [78]. Essentially, Brex is acting as the treasurer for its clients by sweeping their excess cash into a safe, interest-bearing instrument – akin to how a corporate treasurer might sweep a company's overnight cash into a money market sweep account.

For clients who prioritize safety over yield, Brex's Vault account leverages an **Insured Cash Sweep (ICS)** service to distribute deposits across multiple partner banks, each insured up to $250k FDIC, summing to $6 million coverage [79] [80]. This doesn't earn interest (as noted, uninvested cash yields 0% in Brex's account) [81], but it maximizes protection. This feature was heavily marketed after the SVB incident, as mentioned – many startups suddenly cared about FDIC insurance limits.

From Brex's perspective, offering yield on client cash serves a few purposes: - **Attract deposits**: It makes Brex a more attractive place to park money versus a typical non-interest-bearing bank account. During high rate environments, 4%+ yield is compelling. - **Interchange vs. interest trade-off**: Brex earns interchange on card spending; having clients deposit their fundraising money with Brex ensures they also use Brex cards (because the Brex account is the source for card repayment). Even if Brex passes most of the MMF yield to customers, the arrangement keeps customers in Brex's ecosystem. In practice, Brex likely takes a small share of the MMF management fee or a rebate (the NerdWallet disclosure mentions NerdWallet gets 0.85% of AUM from Brex's provider as referral; Brex itself might get some share too) [82]. - **Future banking ambitions**: By managing customer cash, Brex gets experience and data on handling large balances, which could pave the way for more advanced treasury services or eventually its own bank charter.

Brex's treasury must manage the **operational aspects** of these services. For the MMF, Brex Treasury LLC buys shares in the fund for the customer and must track those holdings (with SIPC insurance up to $500k on the brokerage account) [83]. For the FDIC sweep, Brex has to maintain relationships with multiple banks and ensure automatic allocation of funds in increments to each (and redistribute if a bank's cap is reached). This is non-trivial operationally, but automated by fintech. Notably, in March 2023's crisis, Brex quickly scaled this sweep mechanism to accommodate a surge of new accounts – a testament to its treasury infrastructure.

One can think of Brex's offerings as akin to an **internal treasury for startups**: the Brex account is the cash concentration point, the MMF is the short-term investment vehicle (like a T-bill sweep), and the card is the payment and credit tool. Brex's platform is effectively a *treasury management system (TMS) for its clients* on top of being a bank account.

From Brex's own financial perspective, **client deposits are off-balance-sheet or pass-through** (since Column N.A. holds the checking funds and Brex Treasury LLC handles the MMF). That means Brex doesn't get to use those deposits for lending (unlike a bank would). However, the deposits improve Brex's business model by driving spending (interchange) and allowing Brex to potentially earn some net interest margin via arrangements with partner banks or the MMF. The **NerdWallet 2025 review** confirms customers can choose how to allocate funds: either in *Vault (insured cash)* or *Treasury (invested)* [84], giving flexibility per the company's risk appetite.

In summary, Brex's treasury services combine safety and yield options that mirror what a sophisticated corporate treasury would do – except offered to even the smallest startups in a turnkey way. This **"democratization" of treasury management** (startups earning treasury yields on idle cash) became a major selling point, especially when yields rose. Brex effectively turned a traditional treasury task (idle cash investment) into a product feature.

3.4 Credit Risk Integration and Underwriting

Brex's differentiation in the early days was its approach to **credit risk**: instead of relying on personal guarantees or credit scores, Brex underwrote based on a company's financial strength (bank balance, investor backing, revenue). This innovative underwriting is deeply integrated with its treasury and risk operations.

Brex's model connects to the customer's **bank accounts in real-time** to gauge how much cash they have and how it's trending. Based on that, Brex sets a dynamic credit limit – typically a percentage of the cash balance (initially 5–20% of the company's cash) [85]. For example, a startup with $500k in the bank might get a $50k–$100k credit limit on the Brex card. This approach directly ties the credit exposure (the receivable Brex might have to fund) to the customer's liquidity, ensuring the customer can likely pay. It's a treasury-minded way to manage credit risk: *lend only what the customer can repay today*.

Moreover, Brex re-assesses this limit **daily** as balances change [86]. If a customer starts burning cash and their bank balance falls, Brex will automatically reduce the card limit to limit risk. This dynamic underwriting kept losses extremely low even for a risky startup segment [87]. Essentially, Brex's risk management acted like an automated treasury analyst, watching each customer's liquidity position day by day.

The integration of AI and forecasting further enhanced this. Brex developed a **probability-of-default (PD) model** that forecasts a startup's future cash balance (looking out to the statement due date) rather than just current balance [88] [89]. By predicting whether the customer will have enough cash at statement end, Brex could set a limit that the customer is *97.5% confident* to be able to pay [90] [91]. This approach, using machine learning on historical transaction data to forecast cash flows, allowed Brex to stabilize limits (reduce day-to-day oscillations) while still protecting against default risk [92] [93]. The result was 80% fewer limit drops and maintained low risk [94]. In treasury terms, Brex introduced **real-time credit risk monitoring and predictive analytics** – an AI-driven "liquidity forecast" for each client, and managed credit exposure accordingly. This is a cutting-edge fusion of treasury liquidity insight with credit risk management.

Credit risk integration also extends to how Brex finances itself, as discussed: by demonstrating strong credit performance (low losses, high repayment rates), Brex earned those AA ratings on securitizations [65]. Kroll's AAA upgrade in 2025 for Brex's notes was noted to *"optimize its cost of financing and improve liquidity of its funding"*, reinforcing how critical credit excellence is to treasury outcomes [95]. Brex's treasury and risk teams work hand-in-hand: risk models protect the portfolio, and treasury leverages

the results to raise cheaper capital, which in turn can be passed through in better pricing or more rewards, fueling growth.

Another aspect is **limits during crises**. When SVB collapsed, Brex explicitly *"ensured credit card limits were not impacted"* [70] despite turmoil. This implies Brex might have temporarily altered its algorithm to avoid slashing limits just because a customer's bank (SVB) was in trouble – a human risk decision to not exacerbate clients' cash crunch. It shows flexibility in risk rules during extraordinary times, a treasury/risk decision balancing pure model output with business relationship management.

Brex's handling of credit risk stands as a model for modern fintech: continuous data-driven underwriting, integrated with customers' real financial conditions. It transforms credit from a static one-time decision into a **dynamic, real-time managed risk**. For customers, this meant **no personal guarantees**, higher limits than traditional cards would offer, and the assurance that if they keep healthy cash reserves, their corporate spending needs are met. For Brex's treasury, it meant a highly **predictable receivables portfolio** with quick reaction ability – which investors reward with high credit ratings, and which allows high growth without high losses.

Brex Treasury Takeaways – "Toolkit" Summary: Brex illustrates the treasury innovations a fintech can achieve by blending product and financial strategy: - *Dynamic Credit Limits:* Use live bank data to set and adjust card limits (5–20% of cash balances) so that credit exposure scales with customer liquidity [85]. - *Float Financing Strategy:* Diversify funding via warehouse lines and securitizations to fund card receivables at low cost [61] [96]. - *Customer Cash Management:* Offer integrated accounts with both insured deposits (up to $6M FDIC) and money market fund investments (~4% yield) so clients' idle cash earns return [76] [79]. - *Expense & Cash Visibility:* Provide software tying card spending to budgets and real-time tracking, enhancing customers' internal treasury controls (Brex becomes a one-stop spend management and treasury dashboard). - *Crisis Response:* Rapidly adjust treasury operations in crises (e.g., increase insurance, provide emergency credit) to safeguard clients and by extension, strengthen the fintech's reputation [70]. - *Partnership for Global Reach:* Rather than building international banking from scratch, partner (with Airwallex) to use an existing global treasury network, accelerating expansion [59].

Brex's approach underscores a fintech "treasury playbook" in its own right: **integrate technology and data to manage risk dynamically, turn treasury services into customer features, and maintain a robust funding and risk management foundation to support rapid growth.**

4. Comparative Insights

Airwallex and Brex, while different in their primary offerings, both exemplify the modern fintech approach to treasury. Here we distill comparative insights between the two, exploring the fintech treasury playbook they share, key differences in strategy and processes, and lessons that emerge from their experiences.

4.1 The Fintech Treasury Playbook – Common Themes

Both Airwallex and Brex highlight a **"fintech treasury playbook"** that distinguishes them from traditional financial institutions' treasury operations:

- **Technology-First, Real-Time Mindset:** These companies leverage automation, APIs, and real-time data to manage finances. Airwallex built its platform from scratch to give instant visibility and control over global accounts [34]. Brex uses live data connections and AI to adjust credit and

forecast liquidity daily [86] [89]. This is in contrast to many traditional treasuries that still rely on end-of-day reports or manual processes. Fintech treasury means *real-time liquidity and risk management* is the expectation, not the exception.

- **Embedded Treasury Services:** Both firms treat treasury not just as an internal function but as a *product*. Airwallex offers its treasury infrastructure to customers via APIs (embedded finance) [43]. Brex packages treasury capabilities (like cash investing and expense tracking) into its customer-facing platform [73] [76]. This blurs the line between a company's treasury and its product – the playbook is to **monetize treasury expertise by turning it outward**. As a result, treasury becomes a revenue generator, not just a support function.
- **Global and Scalable from Day One:** Airwallex was founded on the premise of borderless business, acquiring licenses globally and building relationships with 50+ banking partners early [97]. Brex, while U.S.-focused initially, recognized that serving "large multinational customers" required global capabilities and thus partnered to achieve worldwide reach quickly [98]. Both avoided the trap of being limited to one region's banking infrastructure. The fintech treasury ethos is *think global, build for scale* – something traditional companies often only consider once they're large.
- **Customer-Centric Risk Management:** Fintechs like these bake risk controls into the user experience in a seamless way. Brex's dynamic limits protect both the company and the customer from getting over-extended (customers don't spend beyond their means; Brex doesn't suffer defaults) [85]. Airwallex's local accounts shield customers from unnecessary fees and FX risk (they don't have to pay conversion fees or wait long times) [33] [27]. Instead of expecting customers to navigate risks, the fintech playbook is to handle it for them in the background (e.g., Airwallex ensuring compliance checks, Brex ensuring you don't spend more than your balance can cover). This "built-in safety net" approach builds trust and fosters adoption.
- **Diversified Revenue through Treasury:** Fintech treasuries find multiple revenue streams. Airwallex earns from FX spreads, payment fees, and BaaS partnerships [52]. Brex earns from interchange on card spend, and possibly a share of interest from deposits or MMFs. Both demonstrate that a well-run treasury can directly drive revenue: FX conversion and interest income are classic bank treasury revenue streams that fintechs have adopted. Also, by managing their own funding costs (through ratings and facilities), they preserve margin on these services.

4.2 Strategy and Process Comparisons

Despite commonalities, Airwallex and Brex have differing focuses and processes, reflecting their core business models:

Business Model Focus: Airwallex is fundamentally an infrastructure and payments company; its treasury is about moving and converting money efficiently across borders. Brex is primarily a spend management and credit provider; its treasury revolves around credit risk and optimizing use of capital. Thus, Airwallex's processes center on multi-currency liquidity and compliance in many jurisdictions, whereas Brex's processes center on underwriting and funding a loan portfolio (card receivables).

Licensing vs. Partnership: Airwallex pursued a strategy of obtaining licenses globally (60+ licenses) and building local banking integrations itself [40] [97]. Brex, on the other hand, often partnered: it uses partner banks for deposit-taking (Column for domestic accounts, other banks for sweep) [75] [80] and partnered with Airwallex for international expansion [59]. This reflects different strategies: Airwallex's DNA is as a provider of financial infrastructure, so owning licenses was core to its value. Brex's DNA is providing a unified software experience; thus it was more pragmatic to outsource certain regulated pieces. Neither is "right or wrong" – it shows that fintechs can choose to **build or partner for treasury capabilities** based on their strengths. The lesson is to focus on what differentiates you (Brex – user experience & underwriting; Airwallex – payments engine & network) and leverage others for the rest.

Risk Management Priorities: Airwallex's risk focus is heavily on **compliance risk (AML/KYC)** and **FX exposure management**. Its processes likely involve rigorous onboarding checks, transaction monitoring, and ensuring no currency imbalances. Brex's risk focus is on **credit risk** and **fraud**. Its processes involve continuous monitoring of customer financial health, periodic stress tests (e.g., what if a major investor pulls out funding from startups?), and securitization due diligence. In effect, each company's treasury risk management is tailored: Airwallex must avoid compliance lapses that could jeopardize licenses; Brex must avoid credit losses that could imperil funding. The insight is that **fintech treasuries must identify and excel at managing their most material risk** (be it FX, credit, or other), often using advanced analytics to do so.

Use of AI and Automation: Both firms leverage automation, but Brex has been particularly vocal about using AI in underwriting (predictive models) [92] and even exploring AI in expense management. Airwallex uses automation to streamline account setup and treasury operations (Bart's comments highlight eliminating manual bank processes) [57]. Both likely use robotic process automation (RPA) or integrated systems for reconciliation and reporting. In practice, their operations teams are relatively lean given the volume they handle, thanks to automation. Traditional banks might have armies reconciling payments; Airwallex likely reconciles millions of transactions via software with minimal human intervention. Brex likely closes its books on card transactions with automated feeds into accounting. The fintech way is *straight-through processing by default*. A specific point: Airwallex's ability to let clients configure approval workflows on the fly (something that would be a ticketed change in a bank) [99] indicates a flexible, software-defined process, versus rigid legacy systems at banks.

Customer Experience as Part of Treasury: Both treat a good customer experience as non-negotiable, even if it means extra treasury work. Example: Airwallex provides instantaneous account opening and local details – treasury had to build that connectivity, but it removes friction for the user [100]. Brex offers immediate virtual cards and dynamic limits – treasury had to make real-time risk decisions possible. They prioritize processes that *make the client's financial life easier*, whereas a traditional institution might prioritize internal policy adherence at the expense of client friction. This customer-centricity in treasury operations is a strategic choice that pays off in loyalty and growth.

To crystallize differences and similarities, below is a comparison table of key aspects:

Aspect	Airwallex	Brex
Core Treasury Focus	Global multi-currency payments & FX liquidity.	Corporate credit card receivables & cash management.
Licensing Approach	Holds 60+ licenses worldwide to operate independently [40].	Partners with banks/fintechs for licenses (Column for accounts, Airwallex for int'l) [59] [75].
Revenue Model	FX conversion fees (0.3–0.5% markup) [36], transaction fees, platform API fees from partners.	Interchange fees (~1-3% of spend), software subscriptions (if any), possibly share of yield on client funds.
Multi-Currency Handling	Native: local accounts in 60+ countries, 20+ currencies in one wallet [23] [24].	Limited native support; leverages Airwallex for local currency card spend and collections [59]. Primarily USD-centric accounts.

Aspect	Airwallex	Brex
FX Risk Management	Offers client hedging tools (lock rates) [29]. Internally nets client FX, hedges exposures.	Not a major service for clients (no complex FX offering publicly). Minimal FX exposure internally (mostly USD operations).
Credit Risk	Not a lender to clients (aside from short settlement extension). Focuses on counterparty bank risk and AML risk.	Core focus: Dynamic underwriting of clients' credit using bank data [85]. Funds credit via debt and equity.
Treasury Services to Clients	Embedded accounts, FX, payments APIs for clients' products [43]. Essentially a banking-as-service provider.	Business accounts with high FDIC insurance and yield (treasury account) [73] [76]. Integrated expense management tools.
Funding & Liquidity	Client funds safeguarded in segregated a/cs (not used for lending). Operational liquidity from venture capital and revenue.	Raises debt (warehouse lines, securitization) to fund card float [61] [63]. Manages liquidity to ensure all transactions covered.
Compliance & Regtech	Heavy emphasis: KYC/AML in every market, data security (PCI DSS, SOC2) [40]. Acts as regulated entity globally.	Compliance focus on KYC for onboarding businesses, and ensuring spend controls (e.g., blocking prohibited transactions). Less multi-jurisdiction complexity until recent global expansion.
Scalability	Highly scalable – new markets or partners add via API using existing infrastructure. Has onboarded large partners (e.g., Navan, Plateform) fast [101].	Scalable in customer count via self-service signups (for eligible startups). Some scaling pains when broadening beyond core niche (had to tighten criteria in 2022 for small businesses).
Use of AI/ML	Uses automation for instant account setup and possibly fraud detection. Exploring AI in routing payments or optimizing FX.	Advanced use in credit (PD model forecasting balances) [92]; beginning to use AI for expense management (receipt capture, etc.).

(Sources: Airwallex and Brex websites, blogs, and external analyses as cited above.)

4.3 Lessons and Emerging Best Practices

Lesson 1: Treasury as a Strategic Differentiator – Both Airwallex and Brex demonstrate that strong treasury capabilities can be a market differentiator. Airwallex's ability to simplify international banking for customers is directly due to its treasury infrastructure; this "solves the treasurer's headache" and attracts business [38] [39]. Brex's dynamic credit and integrated cash management made it a favorite of startups, as it essentially offered them a mini-treasury department out of the box. For other companies, the takeaway is to invest in treasury tech and expertise not just for internal efficiency, but as a feature to offer clients or as a selling point (e.g., "choose us, we manage your funds better/safer"). Fintechs turned treasury from a back-office role into a front-and-center value proposition.

Lesson 2: Importance of Trust and Compliance – Fintechs handling money must establish trust quickly. Airwallex did so by obtaining reputable licenses and emphasizing security standards [40]. Brex did so by securing customer funds during crises and transparently communicating (it famously emailed customers during SVB crisis about measures it was taking). A breach in compliance or a major loss event could be catastrophic for these non-bank entities, so they have set *proactive risk management* as a cornerstone. For instance, Airwallex built compliance features (like embedded KYC/AML APIs for marketplace clients) right into their services [54] – making compliance a competitive advantage rather than a cost. The broader lesson is that in financial innovation, **trust is earned by exceeding regulatory requirements and by visibly safeguarding customer funds**.

Lesson 3: Partner to Fill Gaps – Fintechs don't have to do everything themselves. Brex partnering with Airwallex to expand globally is a case in point: it accelerated Brex's expansion by leveraging Airwallex's licenses and accounts network [102]. Conversely, Airwallex partnering with firms like Brex validates its platform and feeds volume into its treasury engine. This shows an ecosystem mindset: *focus on your strength, and partner for the rest.* Many successful fintechs follow this – e.g., rely on sponsor banks, outsource certain regulatory pieces, etc., while honing a specific specialty. For companies building treasury functions, the implication is to identify where a partner (bank or fintech) can do better or faster what you need, and integrate with them instead of building anew. The end result can be faster time-to-market and a better product.

Lesson 4: Data-Driven Treasury Management – Both companies live by data. Airwallex provides data to customers (a single view of balances, real-time transaction info) which improves customers' treasury decisions [34]. Internally, Airwallex likely uses data on transaction flows to optimize routing (maybe even deciding optimal paths for payments to minimize cost or delay). Brex obviously uses data to drive underwriting and has metrics like "forecast vs actual cash" by customer that feed models [88]. The success of these firms suggests that **treasury decisions (be it risk, liquidity, or investment) should be grounded in data and analytics, not just static policies**. They also show that machine learning can augment treasury – Brex's improved limit stability and low loss rate were achieved by an AI model forecasting balances [94]. Going forward, as AI in treasury becomes more mainstream (see Section 5.4), the practices pioneered by these fintechs may become standard (e.g., predictive liquidity management, AI-assisted FX hedging).

Lesson 5: Treasury Agility is Key – The ability to respond quickly to changing conditions has been critical. Airwallex rapidly scales into new markets or adds new features (like yield accounts in Australia) to meet customer needs [103]. Brex pivoted from targeting small startups to also serving larger enterprises, which meant adjusting treasury strategy (e.g., doing larger securitizations, offering more robust controls). Their agility in treasury operations – whether onboarding a sudden influx of customers or tweaking risk models on the fly – provides a competitive edge. It's a stark contrast to many corporates that struggle to even change a bank account mandate in under a week. Fintechs teach that **treasury must be flexible and fast-moving**, aligned with the pace of business today. This may require modular systems, cloud-based TMS, and empowerment of treasury teams to make swift decisions.

In comparing Airwallex and Brex, one can see they actually **complement each other** in many ways (indeed, they decided to partner in 2023). Airwallex's CEO Jack Zhang remarked on the burdensome complexity of global expansion with traditional banking, and Brex's CEO Henrique Dubugras noted Brex spent years building financial infrastructure and chooses partners carefully – finding in Airwallex a strong one for global needs [104] [105]. This underscores a final insight: *the fintech treasury ecosystem is forming, where different specialized players interconnect to deliver a seamless experience.* The end-game might not be one mega-bank does all, but rather a network of fintechs each excellent in their niche (FX, credit, etc.) working together via APIs. Airwallex and Brex give us a glimpse of that model.

5. Advanced Treasury Topics

Modern treasury management is evolving rapidly with new techniques and technologies. In this section, we explore advanced topics relevant to both large corporate treasuries and fintech innovators: **cash pooling structures**, **real-time liquidity management**, **treasury automation**, and the use of **AI in FX risk management**. These topics represent the cutting edge of treasury practice, many of which are facilitated or exemplified by companies like Airwallex and Brex.

5.1 Cash Pooling and Global Liquidity Optimization

Cash pooling, as introduced earlier, is a technique for concentrating cash to optimize liquidity. In advanced practice, multinational companies establish either **physical cash pools** or **notional pools** across their global bank accounts.

- In a *physical cash pool* (a.k.a. cash concentration), funds are automatically swept between accounts to achieve target balances. For example, each subsidiary might have a zero-balance account (ZBA) that sweeps excess to a master account nightly (zeroing out) and pulls from the master if there's a deficit [4] [5]. Advanced setups allow **multi-tier pooling** (regional pools that then sweep to a global pool) and use of **in-house banks** where the company's treasury acts as a bank to its units, keeping internal ledgers of each unit's position.
- In *notional pooling*, accounts aren't physically transferred; instead, a bank overlays a virtual consolidation where it calculates interest on the net pooled balance across entities [6]. Advanced notional pools can include multi-currency notional pooling – where different currency accounts are notionally pooled with the bank using FX rates to offset balances (though this can have tax implications).

The aim is to ensure cash-rich parts of the company fund cash-poor parts, rather than externally borrowing or leaving cash idle. This reduces interest costs and often frees trapped cash in restrictive countries by notionally using it as collateral for deficits elsewhere [106].

Key advanced considerations in cash pooling: - **Intercompany lending and transfer pricing:** When pooling, moving cash between entities is effectively making intercompany loans. Companies must set appropriate interest rates (transfer pricing) to satisfy tax authorities that one country isn't disadvantaging another. Complex pooling arrangements involve legal agreements and documentation of these intercompany flows [107]. - **Regulatory constraints:** Some countries have regulations against sweeping funds offshore or mingling them. Advanced cash pooling solutions maintain sub-pools or **trapped cash strategies** in such countries (e.g., investing trapped cash locally or using it to pay local supplier early to reduce group cost). - **Bank selection and technology:** Not all banks can do global pooling across all currencies. Often a global bank is chosen to run the pool across many markets, and technology interfaces feed real-time balances to a treasury management system. Advances allow **intra-day sweeps** or multiple sweeps per day (near-real-time pooling), whereas traditionally pooling was end-of-day only [108].

For fintechs like Airwallex, their multi-currency wallet is arguably a form of notional pooling for their clients – a customer's various currency balances collectively represent their liquidity, and Airwallex helps them deploy it where needed (though Airwallex actually physically moves money in background when necessary). Brex's sweeps of customer funds to different banks is a customer-level pooling to maximize insurance.

Overall, cash pooling remains a **cornerstone of liquidity optimization**. The advanced goal is **global cash visibility and mobilization**: seeing all cash across the world and concentrating it (physically or notionally) to either reduce debt or increase interest income. As treasury tech improves, we're seeing pooling become more **dynamic** (even real-time as next section covers) and more **accessible** (mid-sized firms using pooling via their banking partners or fintech tools, not just Fortune 100 companies).

5.2 Real-Time Liquidity Management

Traditional liquidity management looked at yesterday's balances; **real-time liquidity management** looks at *right now*. With the advent of instant payment systems (24/7 real-time payments) and open banking APIs, treasurers can now monitor and move funds on a continuous basis.

In a real-time treasury world: - **Balances and cash positions are updated instantaneously.** Instead of waiting for a bank's end-of-day report, APIs can pull current balances from banks anytime. A treasurer can have a dashboard that, at any moment, shows exactly how much cash is in each account globally. This is essentially what Airwallex offers its users with multi-entity, multi-currency visibility [34]. - **Intra-day forecasting** becomes possible. Treasurers can project cash inflows/outflows for the *next few hours* and take action. For example, if a big outflow at 3pm will cause an account to go negative by 5pm, an automated alert could prompt a transfer from another account at 4pm to pre-empt an overdraft. This level of agility requires systems that combine forecast data with real-time balance info. - **Instant movements** of funds between accounts, even across countries, to wherever they are needed. Many banking networks now have real-time gross settlement or faster payment schemes. Treasury systems can leverage these to do *just-in-time funding*. E.g., a central account can push funds to a local account an hour before payroll runs, rather than keeping money idle in the local account days in advance.

Real-time liquidity is also about monitoring liquidity risk indicators continually. For instance, banks and large corporates look at intraday liquidity usage – ensuring they have enough buffers for unexpected outflows at any time. **Basel III regulations** brought in metrics like Liquidity Coverage Ratio (LCR), which while calculated on 30-day horizon, have pushed firms to better manage even intra-day liquidity. Some banks provide **APIs for intraday transaction feeds**, allowing treasury to see major debits/credits as they happen.

The benefits of real-time liquidity management include: - **Optimized Cash Utilization:** If you know precisely when and where cash is needed, you can deploy cash at the last possible moment to maximize its use elsewhere until then (earning interest or reducing debt). - **Fewer Idle Balances:** It reduces the need to hold large precautionary buffers in each account "just in case". Instead, a central buffer can cover needs, and distribution is done real-time. This notion was echoed by Airwallex's vision of moving funds instantly to where needed [35]. - **Improved Resilience:** During volatile events (market swings, operational incidents), real-time info allows quick decisions – e.g., moving funds away from a troubled bank, or securing extra borrowing immediately if needed. In crises like the SVB run, those with real-time capabilities moved funds out faster. Brex's quick response to onboard customers and move their money presumably relied on very swift liquidity actions.

Challenges to real-time liquidity: It's not just technology; processes and mindset need to adjust. Treasurers must be comfortable making decisions faster, possibly automating some (like algorithmic sweeping). Operationally, ensuring all systems (TMS, bank platforms) talk in real-time and having staff or automated rules to handle issues 24/7 is non-trivial. Not to mention, not all jurisdictions have 24/7 payments yet (though that's the direction globally).

Nonetheless, the trend is clear: a **"real-time treasury"** is emerging [109]. Citi, for example, offers real-time liquidity sharing and APIs to optimize balances across accounts continuously [110]. Fintechs like

Trovata emphasize that 62% of CFOs see real-time financial data as a must-have for resilience [111]. The future likely holds **autonomous liquidity management** – AI-driven programs that shuffle cash around the world automatically as needs and market conditions dictate, every minute of the day. Treasurers will set the guardrails and strategy, and the systems will do the rest.

5.3 Treasury Automation and AI-Driven Operations

Automation in treasury is about letting systems handle routine tasks and even complex analyses that historically consumed manual effort. Today's treasury teams aim for **straight-through processing (STP)** in as many workflows as possible: payments, deal execution, reconciliations, reporting, etc., should occur with minimal human intervention.

Key areas of treasury automation: - **Payments and Cash Operations:** Automating payment initiation through to settlement and reconciliation. Modern treasury management systems (TMS) connect to banks via host-to-host or API, automatically pull bank statements, match transactions to forecasts or invoices, and post accounting entries. This eliminates manual data entry and reduces errors. For instance, automation can achieve STP rates where, say, 95% of transactions require no manual touch (only exceptions or mismatches need review). Airwallex's platform likely achieves very high STP for client payments (especially via API integration). Brex automates expense reconciliation by integrating card transactions with receipts and accounting software. - **Cash Forecasting and Analysis:** Tools now automate data gathering for forecasts (pulling ERP data, using machine learning to predict trends). Instead of a treasury analyst compiling spreadsheets, systems like GTreasury or Kyriba can auto-generate forecasts and even update them daily with actuals. AI can also improve forecast accuracy by analyzing patterns (e.g., Kantox cited a company improving forecast accuracy from 70% to 96% with AI [112]). - **Deal Execution:** Many treasuries automate FX trades or investments. For example, setting a rule: if an account exceeds $X, automatically invest surplus in a money market fund, or if a currency exposure hits $Y, auto-execute a forward contract. Banks offer electronic trading platforms and even *algos* that can execute large FX trades in slices to minimize market impact. Corporate treasuries might not fully algorithmic trade like hedge funds, but they can automate simpler tasks like rolling over a short-term investment or swapping cash between currencies at set times. - **Reporting and Compliance:** Generating daily liquidity reports, debt covenant compliance calculations, or regulatory filings can be automated. Instead of manually gathering data for a board report on cash, a dashboard can be live accessible. Robotics (RPA) has been used by some treasury teams to perform tasks like logging into banking portals to retrieve statements where APIs aren't available, or consolidating data from multiple systems.

The impact of automation is evident in KPIs: Treasuries track **automation rates** (as mentioned, percentage of processes automated) [19] and strive for continuous improvement. High automation leads to speed (real-time reporting vs days), accuracy (fewer manual errors), and allows treasury staff to focus on strategic tasks rather than clerical ones.

AI in Treasury Operations goes hand-in-hand with automation: - **Machine Learning for Anomaly Detection:** AI can monitor transactions to flag unusual patterns that might indicate fraud or error. For example, a system can learn typical daily cash flows and alert if an outbound payment is wildly off pattern (complementing rule-based controls). We saw an example where a UAE treasury built an AI to catch duplicate or fraudulent payments [113]. - **Natural Language Processing (NLP) for Data Handling:** AI can extract information from unstructured data. An example given was using AI to fill KYC forms by pulling data automatically [114] – something that could apply to treasury documentation too (like retrieving credit ratings or news for counterparties automatically). - **Chatbots and Treasury GPT:** As FIS has demonstrated with its Treasury GPT integrated in its system [115] [116], treasurers can use conversational AI to query data or even execute tasks ("Show me our cash position excluding today's

large receipts" or "What was our average interest rate last quarter?"). This can greatly enhance user interaction with treasury systems. - **Robotic Process Automation (RPA):** This is simpler than AI, but worth noting: RPA bots can mimic human actions (clicking, typing) to automate those legacy tasks where integration isn't available. Many treasuries use RPA as a bridge to full integration.

The human element: Automation doesn't remove humans from treasury, but it elevates their role. Instead of daily firefighting or spreadsheet jockeying, treasury professionals can focus on strategy – analyzing what the data means, making policy decisions, and handling exceptions that automation flags. AI is seen as *augmenting* treasury teams, not replacing them (as a EuroFinance article put it, "AI handles the numbers but treasury handles the why") [117]. Indeed, treasurers are embracing AI to enhance decision-making on liquidity and FX while they retain control over strategy [118].

Aspirational level: Some envision an **autonomous treasury**, where AI not only identifies but also implements optimal actions (within set guardrails). For instance, an AI could decide the best way to fund a shortfall (draw on credit line vs. shift from another region vs. issue commercial paper) based on cost and constraints, then execute it. We are moving in that direction gradually – currently, many firms still have AI as advisory, requiring human sign-off on critical moves.

Brex and Airwallex are already living some of this future: Brex's AI forecasts balances and essentially sets credit limits automatically [90] [91], which is a traditionally human credit committee task. Airwallex's entire platform is an automation of banking processes that used to require humans (opening accounts, instructing payments). The efficiency gains they have over incumbents are largely due to automation and smart use of tech.

For any treasury, the call to action is clear: **embrace automation or fall behind**. The volume and velocity of financial operations in a digital world are beyond what manual processes can handle optimally. Automation, coupled with AI for intelligence, is becoming the price of entry for effective treasury management.

5.4 AI in FX Risk Management

Foreign exchange risk management stands to be significantly enhanced by artificial intelligence. AI's strengths in data analysis, pattern recognition, and prediction align well with the challenges of FX: huge data sets (market rates, economic indicators), complex patterns (trends, mean reversion, volatility clustering), and the need for timely decisions.

Applications of AI in FX risk management:

- **FX Forecasting:** AI/ML models (like neural networks or gradient boosting) can be trained on macroeconomic data, market sentiment (even news or social media), and historical price series to predict future exchange rate movements or at least assess probability distributions. While predicting FX is notoriously hard (markets are influenced by unforeseen events), AI can often detect short-term patterns or regimes that humans might miss. Even a modest improvement in forecast accuracy can help treasurers time hedges better or set more effective hedge ratios. For example, one AI solution (AtlasFX) claims to cut FX forecast errors by 50% [119].
- **Hedging Strategy Optimization:** Rather than using static rules (hedge X% of exposure for Y months), AI can simulate thousands of scenarios and hedge strategies to recommend an optimal strategy that balances risk and cost. It can consider correlations between currency pairs, the company's risk tolerance, and even dynamically adjust strategies as market conditions change. Kantox noted AI can recommend optimized hedging strategies and improve exposure

management [15] – implying ML can suggest, for instance, which exposures to hedge and which to leave open based on expected value and risk.

- **Trade Execution (Algo Trading):** Big financial institutions already use AI to execute FX trades in slices or at times that minimize cost (arriving at the day's benchmark rate, etc.). Corporate treasurers may soon tap into these algo trading strategies via bank portals that incorporate AI. This reduces the slippage or extra cost when treasurers go to market to buy/sell currency.
- **Risk Monitoring and Early Warning:** AI can analyze various indicators (option market data, cross-asset movements, political news) to gauge when a currency might become particularly volatile or risky. Treasury could get early warnings like "The model predicts a high likelihood of GBP volatility in the next week due to upcoming events" thereby prompting preemptive hedging or tightening of risk limits.
- **Cash Flow-at-Risk Modeling:** AI can enhance simulations for FX outcomes on cash flows. Traditional Cash-Flow-at-Risk models might use Monte Carlo with basic assumptions; AI could potentially generate scenarios that better capture fat tails or crises by learning from historical episodes.

One important aspect is AI can handle **multivariate complexity** – many currencies, many factors – better than manual methods. For a company with dozens of currency exposures, an AI could simultaneously consider hedging decisions across the portfolio to optimize global outcome, rather than a human treasurer making decisions currency by currency.

Real-world progress: Large corporates and banks are experimenting. For instance, HSBC and others have talked about using machine learning for short-term FX forecasting for internal treasury. Fintech firms like Kantox build AI into their FX management tools. On the SME end, solutions may come through fintech platforms abstracting the AI – e.g., a platform could simply tell a small business "we hedged an extra 10% of your EUR exposure today because our AI signaled a risk of euro weakening".

Limits and Considerations: AI isn't infallible. It might overfit or be blindsided by unprecedented events (e.g., it might not predict a sudden central bank intervention). Treasurers must treat AI outputs as decision support, not gospel. There's also the **black box issue** – complex AI might not explain why it recommends a strategy. For comfort and compliance, treasurers might prefer AI that provides reasoning or at least is interpretable to some degree (this is an active area of AI research, to make models explain their predictions).

Additionally, integrating AI into the treasury workflow is a change management task. People need to trust the AI. One way trust builds is by pilot programs – e.g., run AI recommendations in parallel with current strategy for a while to prove value. As Eleanor Hill pointed out, many treasury teams focus on AI for cash forecasting first (because it's a clear use-case) but might be missing easier wins in other areas [120]. She advocates looking at "low-hanging fruit" in AI, which could be things like automating tedious compliance (KYC) or fraud detection, before tackling something as ambitious as predictive cash forecasting or FX – interestingly she challenges the hype on forecasting and suggests other applications can give quicker ROI [121] [15].

AI in context of Airwallex/Brex: Neither have explicitly publicized AI for FX risk, but Airwallex likely uses algorithms (if not ML yet) to price FX and net exposures. Brex uses AI in credit risk primarily. However, given Airwallex's tech focus, it could introduce AI-driven hedging for clients down the line (e.g., automatic forward contracts when volatility is predicted to spike).

To sum up, AI in FX risk management promises to make treasury operations *more proactive and data-driven*. It aligns with the broader theme of doing more with less – treasury teams can manage larger exposure volumes with the same or fewer people by relying on intelligent systems. In a world where

currency markets can be turbulent (as seen in recent years with events like Brexit, pandemic swings, etc.), having AI as a co-pilot could be a significant advantage to mitigate risks and capture opportunities (like knowing when to leave an exposure open because the model expects a favorable move).

As these advanced topics show, the treasury field is at an exciting frontier. Concepts like global cash pooling and instant liquidity, which once only the most sophisticated multinationals attempted, are becoming accessible to smaller firms via fintech solutions. Automation and AI are elevating treasury from a largely operational function to a high-tech analytical hub that can materially influence company performance.

The experiences of Airwallex and Brex underscore this evolution – one can imagine even 10 years ago, a startup company having a real-time multi-currency treasury dashboard (Airwallex) or an AI setting credit limits (Brex) would sound far-fetched. Today it's reality. The coming years will likely bring further convergence of these trends: perhaps *AI-managed cash pools that work in real-time* and *treasury bots that execute hedges 24/7*. Treasurers will increasingly act as **strategists and supervisors of intelligent systems**, ensuring that the automated financial engine of their company aligns with business goals and risk appetite.

6. Appendices

6.1 Glossary of Key Terms

- **Cash Pooling:** A treasury technique consolidating multiple bank account balances into one pool (physically or notionally) to optimize interest and liquidity use [7]. Allows a company's surplus cash in one account to cover deficit in another.
- **Charge Card:** A type of credit card where the full balance must be paid off each billing period (no revolving balance). Brex offers a corporate charge card, meaning companies must repay within a set period (e.g., 30 days).
- **Embedded Finance:** Integration of financial services into non-financial platforms via APIs. For example, Airwallex providing its banking/Treasury services inside other software [43]. It allows any company to offer financial features without being a bank.
- **FX Forward Contract:** A derivative contract to exchange a specified amount of one currency for another at a fixed rate on a future date. Used to hedge FX risk by locking in exchange rates in advance.
- **Insured Cash Sweep (ICS):** A service that spreads a customer's deposits across multiple banks in increments within FDIC insurance limits. Brex's Vault uses this to insure up to $6 million of deposits [79].
- **Interchange Fee:** Fee paid by a merchant's bank to the card issuer for each card transaction (usually a percentage of the sale). It's a key revenue source for card issuers like Brex. Ultimately funded by merchants as part of the merchant discount rate.
- **KYC / AML:** "Know Your Customer" and "Anti-Money Laundering" regulations requiring financial institutions to verify customer identity and monitor transactions for suspicious activity. Critical compliance areas for fintech treasuries [122] [123].
- **Money Market Fund (MMF):** An investment fund that invests in short-term debt instruments (like Treasury bills, commercial paper). Often used by treasurers for parking excess cash. Brex's Treasury account uses a government MMF (Dreyfus) to generate yield for clients [83].
- **Notional Pooling:** A cash pooling method where balances of separate accounts are **virtually** combined for interest calculation, without physical transfers [6]. Banks pay/charge interest on the net aggregate balance.

- **Probability of Default (PD):** Likelihood that a borrower will default on obligations, often expressed as a percentage over a given time (e.g., 1-year PD). Brex built a PD model to predict customer default risk indirectly by forecasting cash balances [92].
- **Securitization:** The process of packaging assets (e.g., loans, receivables) into marketable securities which are sold to investors [124]. The issuer (Brex) gets immediate funding, investors receive interest and principal from the asset cash flows. Often involves tranches with credit ratings [63].
- **Spread (FX or Interest):** In FX, the difference between the buy and sell rate – effectively the fee or margin a provider takes. Airwallex's low spread (e.g., 0.5%) is a competitive advantage [36]. In lending or bonds, the spread refers to margin above a benchmark rate.
- **Straight-Through Processing (STP):** Processing transactions end-to-end without manual intervention. A high STP rate is a sign of strong automation in treasury operations (e.g., automated payment processing, automatic reconciliation) [19].
- **Treasury Management System (TMS):** Software that centralizes treasury functions – cash management, risk management, deal tracking, etc. Examples include Kyriba, SAP Treasury, etc. Modern TMS often have real-time dashboards and API connectivity to banks [125].
- **Yield (Seven-day yield):** For money market funds, seven-day yield is an annualized yield based on the income generated over the past 7 days. It's a standard reporting metric. Brex quoted a 4.22% seven-day yield for its Treasury MMF at one point [83].

6.2 List of Figures (Diagrams and Tables)

- **Figure 1:** Airwallex vs. Brex Comparison Table – Key Treasury Aspects (Section 4.2). This table summarizes the focus, approaches, and features of Airwallex and Brex across various treasury dimensions, highlighting both commonalities and differences [59] [75].
- *(No other figures were embedded. All information is conveyed in text and table format to ensure clarity in a PDF/Word export.)*

6.3 References

1. **Treasury KPIs and Trends (2025)** – *Treasury Management International (TMI)*, "Setting Relevant Treasury KPIs for 2025 and Beyond." Discusses importance of liquidity, cash forecast accuracy, bank fee KPIs, and technology metrics for modern treasury [17] [19].

2. **Association of Corporate Treasurers – Treasury KPIs** – "How to set treasury KPIs" by ACT. Lists 10 important KPIs and explains the adoption and purpose of KPIs in treasury (cash visibility, forecast error, hedge effectiveness, etc.) [16] [1].

3. **Airwallex Q&A with Treasury Director** – *Airwallex Blog (April 2025)*, "How Airwallex solves the treasurer's historic headache." An interview with Bart Verweij detailing Airwallex's advantages: quick account opening, local collections, multi-entity management, and future vision for treasury [25] [35].

4. **Airwallex Global Treasury Product Page** – Describes Airwallex's embedded finance "Global Treasury" APIs: multi-currency wallets, FX management, regulatory coverage (60+ licenses), etc., aimed at platforms [58] [28].

5. **Airwallex Compliance and Security** – *Airwallex Blog (Jan 2025)*, "Understanding security and regulatory compliance when scaling a global marketplace." Provides insight into Airwallex's licenses (60+), compliance measures (KYC/AML, data security) and how embedded finance partners can leverage that [40] [54].

6. **Brex Business Account Review** – *NerdWallet (Jul 2025)*, "Brex Business Account: Checking, Cash Management for Startups." Details Brex account features: checking via Column bank, Treasury (Dreyfus MMF investment via Brex Treasury LLC) with ~4.22% yield, and Vault FDIC sweep up to $6M [73] [126].

7. **Brex Securitization Strategy** – *Brex blog (Apr 2024)*, "Unpacking Brex's securitization strategy" by Ben Gammell. Explains securitization basics, Brex's use of warehouse lines vs. securitization, benefits of AA ratings (lower funding cost, diversified investors) [61] [65].

8. **Brex SVB Crisis Response** – *Brex blog (Mar 2024)*, "Reaffirming our commitment one year after SVB crisis." Describes Brex's actions during SVB collapse: increasing FDIC insurance, rapid onboarding of new customers, keeping credit lines stable, and offering emergency loans [70].

9. **Brex and Airwallex Partnership** – *FF News (July 19, 2023)*, "Airwallex partners with Brex to accelerate international expansion." Announces Brex leveraging Airwallex's local currency collection for global card and expense reimbursements, and Airwallex's 50+ licenses to support Brex's expansion [127] [102].

10. **TreasuryXL – Cash Pooling Definition** – "What is Cash Pooling?" (TreasuryXL, 2024). Provides an overview of corporate cash pooling, types (ZBA, notional, hard pooling) and advantages (improved cash control, interest optimization, cost savings) [7] [9].

11. **Trovata – Real-Time Liquidity** – *Trovata Blog (Mar 2024)*, "Fortifying Resilience with Real-Time Liquidity Management" by Sergio Garcia. Discusses the shift from end-of-day to real-time liquidity, drivers like APIs and instant payments, and importance for agility and resilience [22] [128].

12. **Kantox Podcast – AI in Treasury** – *Kantox CurrencyCast (Jan 2025)*, "AI, FX Narratives, ESG and Risk Management in 2025 with Eleanor Hill." Covers how AI is being used beyond just cash forecasting, with use-cases: fraud detection, KYC automation, AI recommending hedging strategies in FX, and using AI as a "Treasury assistant" [114] [15].

13. **FIS Global – AI Transforming Treasury** – *FIS Insights (May 2025)*, "AI, machine learning, robotics and beyond" – Key takeaways of how FIS is embedding AI (Treasury GPT chatbot with OpenAI tech) and data lakes into its treasury platform for better efficiency and control [115] [116].

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[1] [11] [12] [13] [14] [16] [18] How to set treasury KPIs | The Association of Corporate Treasurers
https://www.treasurers.org/hub/treasurer-magazine/how-set-treasury-kpis

[2] Treasury Management: Functions, Objectives, and Challenges
https://www.highradius.com/resources/Blog/treasury-management-process-functions/

[3] [17] [19] [20] [21] Setting Relevant Treasury KPIs for 2025 and Beyond | Treasury Management International
https://treasury-management.com/articles/setting-relevant-treasury-kpis-for-2025-and-beyond

[4] [5] [6] [7] [8] [9] [10] What is Cash Pooling? | Easy To Understand | TreasuryXL
https://treasuryxl.com/what-is-cash-management/cash-pooling/

15 112 113 114 120 121 AI, FX Narratives, ESG and Risk Management in 2025 with Eleanor Hill (Treasury Storyteller)
https://www.kantox.com/podcast/treasury-trends-in-2025-eleanor-hill-treasury-storyteller

22 111 128 Fortifying Resilience with Real-Time Liquidity Management
https://trovata.io/blog/real-time-liquidity-management/

23 24 28 29 30 31 43 50 51 52 58 Global Treasury Management - Services & Solutions | Airwallex
https://www.airwallex.com/us/platform-api-and-embedded-finance/global-treasury

25 26 27 32 33 34 35 38 39 57 99 100 103 How Airwallex solves the treasurer’s historic headache
https://www.airwallex.com/eu/blog/how-airwallex-solves-the-treasurers-historic-headache

36 Plans & Pricing | Airwallex Official Site
https://www.airwallex.com/us/pricing

37 FX International Payment API | Interbank Exchange Rates - Airwallex
https://www.airwallex.com/us/platform-api-and-embedded-finance/transactional-fx

40 41 44 45 46 47 48 49 54 55 56 122 123 Security and Regulatory Compliance for Global Marketplaces | Airwallex US
https://www.airwallex.com/us/blog/marketplace-security-regulation

42 9 Key Things to Know Before Opening an Airwallex Account [2025]
https://statrys.com/blog/airwallex/open-airwallex-account

53 59 60 98 102 104 105 127 Airwallex & Brex Partner to Help Accelerate International Expansion
https://ffnews.com/newsarticle/fintech/airwallex-partners-with-brex-to-help-accelerate-international-expansion/

61 62 63 64 65 66 67 68 69 96 124 Unpacking Brex’s securitization strategy | Brex
https://www.brex.com/journal/unpacking-brex-securitization-strategy

70 71 Reaffirming Brex's commitment to customers one year after the SVB crisis | Brex
https://www.brex.com/journal/reaffirming-brexs-commitment-to-customers-one-year-after-the-svb-crisis

72 73 74 75 76 77 79 80 81 82 83 84 126 Brex Business Account: 2025 Review - NerdWallet
https://www.nerdwallet.com/article/small-business/brex-cash-review

78 Brex Blog | Brex
https://www.brex.com/journal

85 86 87 88 89 90 91 92 93 94 How we built a probability of default model without default labels | by Bryant Chen | Brex Tech Blog | Medium
https://medium.com/brexeng/how-we-built-a-probability-of-default-model-without-default-labels-212415bbeef6

95 Brex Receives Bond Rating Upgrade to AAA from Kroll ... - Financial IT
https://financialit.net/news/infrastructure/brex-receives-bond-rating-upgrade-aaa-kroll-bond-rating-agency-achieving-highest

97 101 Navigating the US fintech frontier: Airwallex's expansion strategy and lessons learned - Tearsheet
https://tearsheet.co/keys-to-growth/navigating-the-us-fintech-frontier-airwallexs-expansion-strategy-and-lessons-learned/

106 Currency Consolidation: Notional Pooling vs Cash Concentration
https://business.bofa.com/en-us/content/currency-management-consolidation-strategies.html

107 [PDF] The power of cash pooling in today's business landscape - PwC
https://www.pwc.com/id/en/publications/consulting/cash-pooling.pdf

108 White Paper: The Road to Real-Time Treasury
https://corporates.db.com/publications/white-papers-guides/the-road-to-real-time-treasury

109 [PDF] The Real-time Treasury Evolution: A shift to modernization - Citi.com
https://www.citibank.com/tts/email/2024/tts/2315123-perspectives-corp/The-Real-time-Treasury-Evolution.pdf

110 Guide to Mapping a Course to Real-Time Liquidity - Citi.com
https://www.citibank.com/tts/articles/article201.html

115 116 AI and Machine Learning – Transform Treasury Operations - Insights | FIS
https://www.fisglobal.com/insights/ai-machine-learning-robotics-and-beyond

117 AI handles the numbers but treasury handle the why - EuroFinance
https://www.eurofinance.com/news/ai-handles-the-numbers-but-treasury-handle-the-why/

118 “AI is not replacing us”: why treasurers are embracing AI on their ...
https://www.eurofinance.com/news/ai-is-not-replacing-us-why-treasurers-are-embracing-ai-on-their-own-terms/

119 Enhancing FX forecasting with AI | AtlasFx Risk Management
https://atlasfx.com/blog/enhancing-fx-forecasting-with-ai-a-game-changer-for-treasury-teams/

125 What is a Treasury Management System? Your Complete Guide to ...
https://www.gtreasury.com/posts/what-is-treasury-management-system