

As a Morgan Stanley client, you rely on us to help you reach your financial goals. As a result, you entrust us with not only your aspirations for the future, but also with your confidential information and assets. We want you to know how seriously we take our responsibilities.

Morgan Stanley's protection of clients' assets includes defenses it puts in place against unauthorized persons who might look to gain access to those assets.

Those defenses range from hardware and software solutions that are aimed at protecting our perimeter from cyberthreats, to authentication procedures intended to ensure that we accept only legitimate instructions from authorized parties when we take action for a client's account. Those defenses represent the commitment of every employee at Morgan Stanley and are constantly being enhanced to meet the challenge of the evolving nature of the threats.

Our protections also include constant monitoring and surveillance that are focused on detecting unusual and unauthorized activity in clients' accounts. Trading activity, account disbursements, Morgan Stanley debit card and check transactions, and even your Morgan Stanley online behavior are monitored and compared to historical activity to detect changes in behavior that might signal unauthorized access to an account. Swift and effective detection of unauthorized activity is critical to preventing or limiting loss of assets.



Safeguards Employed by Morgan Stanley

Capital Reserves

Asset Segregation

FDIC Insurance

SIPC Insurance

Additional Protections

Safeguards Employed by Morgan Stanley

In the event you experience a loss associated with fraud or theft, Morgan Stanley has a variety of capital requirements which, in combination with applicable rules and regulations, help protect your assets.



Capital Reserves

Since Morgan Stanley is a financial holding company, it is obligated to meet the Federal Reserve Board's capital requirements. These capital requirements are guided by standards that include the ratio of our Tier 1 Capital to Risk-Weighted Assets and the ratio of Total Capital to Risk-Weighted Assets. These requirements also include limits on our Tier 1 leverage ratio and, finally, are subject to requirements for how much net capital we have. These rigorous capital requirements are established to ensure that Morgan Stanley has sufficient capital on hand at all times to meet its financial obligations. Additional information can be found in the Morgan Stanley Basel III Pillar 3 Disclosures, required by the Federal Reserve, at https:// www.morganstanley.com/about-us-ir/ pillar-us.html.



Asset Segregation

As required by securities law, Morgan Stanley segregates clients' fully paid securities and excess margin securities, and cash. Generally, clients U.S.-listed debt and equity securities are segregated from firm assets at the Depository Trust and Clearing Corporation, which is independently operated and owned by major U.S. banks and brokerage firms. Those segregated assets are not comingled with any firm assets and may not be pledged as collateral, loaned or used by Morgan Stanley for any purpose. In the event of Morgan Stanley's insolvency, this segregation would protect your segregated securities from being used to satisfy claims against Morgan Stanley by its creditors. U.S. government securities are similarly segregated by use of a segregated account at the industry standard agent bank provider for custody of such assets (The Bank of New York (BONY)), and non-U.S. dollar securities are held in segregated accounts at Euroclear and other thirdparty depositories, either directly or indirectly through agent banks for the exclusive benefit of Morgan Stanley's clients. The relatively small amounts of cash held by Morgan Stanley are protected through funding of reserve bank accounts at independent third-party banks, which acknowledge in writing that the account balance is held for the exclusive benefit of our customers and may not be used by Morgan Stanley for its own purposes.



FDIC Insurance

Cash balances swept into deposit accounts at participating banks in the Bank Deposit Program (BDP) are protected by FDIC insurance up to applicable FDIC limits. FDIC insurance is a federal government program administered by the Federal Deposit Insurance Corporation. This insurance covers bank deposits held in bank accounts such as checking, savings, certificate of deposit and money market (not money market funds). The insurance comes into play in the event of a bank failure and covers client cash up to a total of \$250,000, per bank, for each "insurable capacity" (e.g., each individual, joint, etc.). It does not cover investment products that are not deposits, such as mutual funds, annuities, life insurance policies, stocks or bonds, nor does it cover assets held in safe deposit boxes. FDIC insurance also does not cover events such as robberies or thefts. which means, for practical purposes. the coverage provided by FDIC would not apply to cybertheft losses unless it involved the insolvency of the bank. Refer to https://www.fdic.gov for additional details.



SIPC Insurance

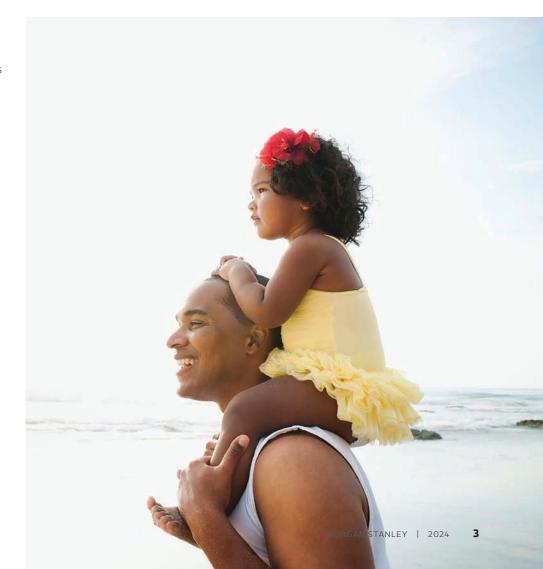
Protection provided your account exceeds what the law requires. While most brokerage firm clients are entitled to the protection provided through Securities Investor Protection Corporation (SIPC), at Morgan Stanley, you also receive protection supplemental to SIPC, which is provided at no cost to you.

Morgan Stanley is a member of SIPC. SIPC protects client net claims up to \$500,000, of which up to \$250,000 may be uninvested cash. Note that SIPC coverage does not protect investors against securities fraud, as it only protects client assets in the event of broker-dealer insolvency. In addition to this SIPC protection, in the unlikely event that client assets that were not segregated are not fully recovered and SIPC protection limits have been paid, Morgan Stanley's supplemental insurance policy would be available to provide protection above the SIPC limits. This coverage is subject to an aggregate firmwide cap of \$1 billion, with no per-client limit for securities and a \$1.9 million per-client limit for the uninvested cash balance portion of any remaining shortfall. Please be advised that you may obtain information about SIPC, including the SIPC brochure, by contacting SIPC at 202-371-8300 or by visiting www.sipc.org.



Additional Protections

Clients who are holders of a Morgan Stanley Debit Card are protected by Mastercard's Zero Liability Program, which covers clients if unauthorized purchases are made on their Debit Card. Furthermore, if their card is used fraudulently, they can rest assured that their Morgan Stanley assets are secure.



FDIC Insurance Coverage

As a Morgan Stanley client, you have FDIC insurance coverage up to applicable limits for free credit balances swept into accounts at Sweep Banks. Morgan Stanley has two insured banks (which act as a "Sweep Bank" for free credit balances in your brokerage and managed accounts): Morgan Stanley Private Bank, National Association (MSPBNA) and Morgan Stanley Bank, N.A. (MSBNA).

Free credit balances across various eligible account types are automatically deposited into deposit accounts at the Sweep Banks via the BDP.¹ The BDP is the default sweep option for eligible accounts. The alternative for free credit balances for accounts that are ineligible for BDP is government money market funds (MMFs), subject to certain cash and household asset minimums, and jurisdictional restrictions.

Funds in the Deposit Accounts at each Sweep Bank are insured by the FDIC, up to the maximum applicable insurance limit (including principal and accrued interest) per depositor when aggregated with all other deposits held by the depositor in the same insurable capacity at the Sweep Bank. The Maximum Applicable Insurance Limit is currently \$250,000 for each insurable capacity.

Generally, any accounts or deposits that you may maintain directly with a Sweep Bank, or through any other intermediary in the same insurable capacity in which the Deposit Accounts are maintained, would be aggregated for purposes of the Maximum Applicable Insurance Limit. Your funds become eligible for FDIC insurance immediately upon deposit in a Deposit Account at a Sweep Bank. FDIC insurance protects funds that have been deposited in the Sweep Banks, provided that the requirements for deposit insurance, including appropriate account titling and record keeping, have been met.

Any deposits (including Certificate of Deposits (CDs)) that you maintain in the same FDIC account ownership category directly with a Sweep Bank, or through an intermediary (such as Morgan Stanley, another broker or depository network), will be aggregated with your Deposit Accounts at the Sweep Bank for purposes of the Maximum Applicable Insurance Limit. You are responsible for monitoring the total amount of deposits that you have with

each Sweep Bank in order to determine the extent of FDIC insurance coverage available to you. Morgan Stanley is not responsible for any insured or uninsured portion of a Deposit Account at a Sweep Bank.

In the event one or both of the Sweep Banks fail, the deposit accounts are insured up to the FDIC limit for principal and interest accrued to the day the Sweep Bank is closed. There is no insurance coverage beyond FDIC limits.

Under certain circumstances, if you become the owner of deposits at one of the Sweep Banks because another depositor dies, beginning six months after the depositor's death, the FDIC aggregates those deposits, for purposes of the FDIC limit, with any other deposits you own in the same capacity at the Sweep Banks. Examples of deposit accounts that may be subject to this FDIC policy include joint accounts, payable-on-death accounts and certain trust accounts. The FDIC provides a six-month grace period to permit you to restructure your deposits to obtain the maximum amount of deposit insurance for which they are eligible.

TWO-BANK ADVANTAGE

In connection with deposits such as BDP, Savings Program, Preferred Savings Program, GlobalCurrency and CDs, you are covered for \$250,000 in FDIC insurance or \$500,000 for joint accounts. With two Sweep Banks, this coverage is recognized at each Sweep Bank making your total FDIC coverage \$500,000 or \$1,000,000, respectively. BDP and the Savings Program utilize both Sweep Banks to increase FDIC insurance coverage. However, this coverage may be reduced if you have additional insured products at either Sweep Bank, primarily MSPBNA where GlobalCurrency deposits are held.

As an example, for individual accounts, the first \$245,000 in free credit balance

minus any other deposits, such as positions in the Savings Program, Preferred Savings Program, GlobalCurrency and CDs held in the same insurable capacity, are automatically swept into deposit accounts at your Primary Sweep Bank, which is either MSPBNA or MSBNA. Deposit Limits are set slightly below the Maximum Applicable Insurance of \$250,000 to allow for accrued interest on the Deposit Accounts. The Primary Sweep Bank is assigned at account opening and, while subject to change on notice, deposits are reflected by Sweep Bank on client account statements. The second \$245,000 (under the BDP) in free credit balance minus any other deposits held in the same insurable capacity are automatically swept into deposit accounts at your Secondary Sweep Bank. Joint accounts have \$490,000 of free credit balance sweep to the Primary and then the Secondary Sweep Bank, irrespective of the balance in any other deposits.

Any additional cash (up to \$20,000,000) automatically sweeps back to your Primary Sweep Bank as uninsured deposits, unless your deposits are eligible to be sent to the Program Banks as described in the Bank Deposit Program Disclosure Statement. All balances in excess of \$20,000,000 automatically sweep to a government MMF. Unlike Deposit Accounts, which are insured by the FDIC, MMFs are covered by the Securities Investor Protection Corporation (SIPC).

Please note that for purposes of the Maximum Applicable Insurance Limit, clients must aggregate all accounts that they maintain with the Sweep Banks in the same insurable capacity, including deposits at the Sweep Banks held through the Savings Program, Preferred Savings Program, GlobalCurrency, CDs and other accounts at both Sweep Banks they hold directly or through Morgan Stanley or other intermediaries.

Hypothetical Example: Maximizing FDIC Coverage

Parents and child/children could have the combination of the following fully insured, single, joint and revocable trust accounts totaling up to \$7,000,000.

ACCOUNT TYPES	OWNER	BENEFICIARIES	MAXIMUM AVAILABLE FDIC COVERAGE PER BANK	MAXIMUM AVAILABLE TWO BANK SYSTEM AT MORGAN STANLEY		
Individual Accounts All single accounts owned by the same person at the same Sweep Bank are added together and insured up to \$250,000.						
Parent 1	Parent 1		\$250,000	\$500,000		
Parent 2	Parent 2		\$250,000	\$500,000		
Child 1	Child 1		\$250,000	\$500,000		
Child 2	Child 2		\$250,000	\$500,000		
Joint Accounts Each co-owner's shares of every joint account at the same insured Sweep Bank are added together and insured up to \$250,000 per each co-owner. A share is the total amount in the joint account divided by the number of owners.						
Parents (with no Children)	Parent 1 and Parent 2		\$500,000	\$1,000,000		
Or Parents with Children Examples						
Parent 1 and Child	Parent 1 and Child 1		\$500,000	\$1,000,000		
Parent 2 and Child	Parent 2 and Child 2		\$500,000	\$1,000,000		
Trusts All trust accounts owned by the same person at the same Sweep Bank are added together, and the owner is insured up to \$250,000 per eligible beneficiary						
Parent 1 as Trust Grantor for Parent 2	Parent 1	Parent 2	\$250,000	\$500,000		
Parent 1 as Trust Grantor for Child	Parent 1	Child 1	\$250,000	\$500,000		
Parent 2 as Trust Grantor for Parent 1	Parent 2	Parent 1	\$250,000	\$500,000		
Parent 2 as Trust Grantor for Child	Parent 2	Child 2	\$250,000	\$500,000		
Child as Trust Grantor for Parent 1	Child 1	Parent 1	\$250,000	\$500,000		
Child as Trust Grantor for Parent 2	Child 2	Parent 2	\$250,000	\$500,000		
Total (if include Joint Account with Parent 1 and Parent 2 with no Children)			\$3,000,000	\$6,000,000		
Total (if include Joint Account with Parent and Parent 2 with Children)			\$3,500,000	\$7,000,000		

For illustrative purposes only. All clients' situations are unique. Child referenced in example is adult child. For additional examples, visit FDIC website at https://www.fdic.gov/deposit/deposits/brochures.html.

FDIC Insurance Reference Chart

Below are the different categories of account types and their respective FDIC limits. As a reminder, Morgan Stanley has the benefit of incorporating a two-insured bank structure.

ACCOUNT TYPE	INSURANCE LIMIT ² (PER OWNER)	AGGREGATION*	OTHER INFORMATION
Individual	\$250,000 principal and accrued interest combined per depository institution.	Other individual accounts that hold the deposits at the same depository institution.	Individual accounts are separately insured from jointly owned accounts that hold the deposits at the same depository institution.
Joint	\$250,000 principal and accrued interest combined per depository institution.	Other joint accounts that hold the deposits at the same depository institution.	 All co-owners of the funds in the account are natural persons. Each co-owner has personally signed required account documentation. Each co-owner possesses withdrawal rights on the same basis.
Self Directed Retirement Traditional IRA, Roth IRA, SIMPLE IRA, SEP IRA, (Self-Directed) Keogh Account, (Self-Directed) 401(k) Plan, (Self-Directed), Section 457 Plan, and any other Self-Directed Employee- Sponsored Defined Contribution Plan.	\$250,000 principal and accrued interest combined per depository institution.	All other self-directed retirement accounts that hold the deposits at the same depository institution.	Retirement accounts are insured separately from non-retirement accounts that hold the deposits of the same depository institution.
Corporation/Partnership/ Unincorporated Association	\$250,000 principal and accrued interest combined per depository institution.	Other accounts of the corporation/partnership/ unincorporated association that hold the deposits at the same depository institution.	The account must be operated for a purpose other than to increase deposit insurance.
Trust	\$250,000 principal and accrued interest combined per depository institution. (Per owner/grantor for each named beneficiary—subject to the requirements listed under "other information" being met) ³	All other trust accounts of the owner/grantor that hold the deposits at the same depository institution.	 The account title must indicate that the account is held pursuant to a trust relationship. The owners and beneficiaries must be identified by name in the account records. A beneficiary must be a person, charity or another nonprofit organization (as recognized by the IRS).
Government Accounts Includes deposit accounts owned by: The United States, including federal agencies; any state, county, municipality (or a political subdivision of any state, county or municipality), the District of Columbia, Puerto Rico and other government possessions and territories; an Indian tribe.	\$250,000 per official custodian.		The official custodian of a public unit is insured up to \$250,000 per bank. Coverage amounts may be more depending on the type of deposit and whether the public unit is located in the same state as the bank.
Employee Benefit Plan Plan participants who want to know more about how a plan's deposits are insured should consult with the plan administrator.	\$250,000 for the noncontingent interest of each plan participant.		The interests of each participant's noncontingent interest under the plan is insured up to \$250,000 per bank. For plans where the interests are contingent, such as health and welfare plans, the coverage is \$250,000 for the plan itself.

Deposits include Certificates of Deposits (CDs), Savings Programs, Preferred Savings Program, BDP, GlobalCurrency, and are aggregated for FDIC calculation by entity or account type.

Earning Your Trust

The firm's businesses, processes and procedures are audited on a regular basis by regulators, including the SEC and FINRA, and the National Futures Association, as well as our external auditor, Deloitte & Touche LLP; and our Internal Audit Division. The measures we take to provide you with the protection you deserve, however, go far beyond these precautions and reflect our commitment to your financial wellbeing.



If you suspect you may be the victim of fraud or identity theft—or if you notice suspicious account activity or receive an email that appears to come from Morgan Stanley but you suspect it may not be legitimate—please contact us immediately at **888-454-3965** (24 hours a day, seven days a week). From outside the United States, you can call collect at +1-801-617-6150 using the international operator.

For more information about Bank Deposit Program, Sweep Banks, and Account Types, visit:

https://www.morganstanley.com/wealth-disclosures/pdfs/BDP_disclosure.pdf

Additional information about SIPC is available at www.sipc.org.

Additional information about the FDIC is available at www.fdic.gov.

The Morgan Stanley Debit Card is issued by Morgan Stanley Private Bank, National Association pursuant to a license from Mastercard International Incorporated. Mastercard and Maestro are registered trademarks of Mastercard International Incorporated. The third-party trademarks and service marks contained herein are the property of their respective owners. Investments and services offered through Morgan Stanley Smith Barney LLC, Member SIPC.

Certain terms, conditions, restrictions and exclusions apply. Please refer to the Morgan Stanley Debit Card Terms and Conditions at http://www.morganstanley.com/debitcardterms for additional information.

Morgan Stanley Smith Barney LLC is not implying an affiliation, sponsorship, endorsement with/of the third party or that any monitoring is being done by Morgan Stanley Smith Barney LLC ("Morgan Stanley") of any information contained within the website. Morgan Stanley is not responsible for the information contained on the third-party website or the use of or inability to use such site. Nor do we guarantee their accuracy or completeness.

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- ¹ Under the Bank Deposit Program, free credit balances held in an account(s) at Morgan Stanley Smith Barney LLC are automatically deposited into an interest-bearing deposit account(s), at FDIC-insured banks. For more information, view the Bank Deposit Program Disclosure Statement. https://www.morganstanley.com/content/dam/msdotcom/en/wealth-disclosures/pdfs/BDP_disclosure.pdf
- ² CDs are insured by the FDIC, an independent agency of the U.S. Government, up to a maximum amount of \$250,000 (including principal and accrued interest) for all deposits held in the same insurable capacity (e.g., individual account, joint account, IRA, etc.) per CD depository. Investors are responsible for monitoring the total amount held with each CD depository. All deposits at a single depository held in the same insurable capacity will be aggregated for the purposes of the applicable FDIC insurance limit, including deposits (such as bank accounts) maintained directly with the depository and CDs of the depository. For more information about FDIC insurance, please visit the FDIC website at www.fdic.gov. Morgan Stanley Wealth Management is not responsible for any insured or uninsured portion of the CDs or any other deposits. There is no FDIC insurance coverage for any principal loses that may occur.
- ³ Some living trusts allocate unequal interests to the beneficiaries. In this case, insurance limits will differ. Insurance limits may apply. Go to www.fdic.gov for more information.

Under the Savings and Preferred Savings programs ("Savings"), Morgan Stanley Smith Barney LLC makes available interest-bearing FDIC-insured deposit accounts(s) at either Morgan Stanley Private Bank, National Association or Morgan Stanley Bank, N.A., each a national bank, Member FDIC, and an affiliate of Morgan Stanley Smith Barney LLC, as selected by the client. Deposits placed in Savings are eligible for FDIC insurance up to \$250,000 (including principal and interest) per depositor, per each bank selected by the client for all deposits held in the same insurable capacity (the "Maximum Applicable Deposit Insurance Amount"). All deposits per bank held in the same insurable capacity will be aggregated for purposes of the Maximum Applicable Deposit Insurance Amount, including deposits maintained through the Bank Deposit Program. The client is responsible for monitoring the total amount held with each bank. The bank also reserves the right to offer promotional rates from time to time. Detailed information on federal deposit insurance coverage is available on the FDIC's website (https://www.fdic.gov/deposit/deposits/). The Savings programs are not intended for clients who need to have frequent access to funds, and those funds will not be automatically accessed to reduce a debit or margin loan in your brokerage account. Withdrawals from an account in Savings are limited to 10 transactions per calendar month, and any withdrawal or transfer over the limit in any one calendar month will be subject to an excess withdrawal fee.

GlobalCurrency is available to clients of Morgan Stanley Smith Barney LLC with an eligible brokerage account. Before undertaking foreign exchange transactions, clients should understand the associated risks. Engaging in foreign currency transactions entails more varied risks than normally associated with transactions in the domestic securities markets. Attention should be paid to market, credit, sovereign and liquidity risks. The foreign exchange transactions and deposits discussed in this material may not be appropriate for all clients. The appropriateness of a particular investment or strategy depends upon a client's particular circumstances and objectives. This material does not provide individually tailored investment advice. Clients can review the GlobalCurrency Disclosure Statement at http://www.morganstanley.com/wealth/disclosures/pdfs/GC_Disclosure_Statement.pdf for more details.

GlobalCurrency Savings Deposits are held at Morgan Stanley Private Bank, National Association, Member FDIC, and are insured up to U.S. dollar ("USD") equivalent limits. FDIC insurance does not protect against losses due to exchange rate movements. For more information about FDIC insurance, please visit the FDIC website at https://www.fdic.gov/deposit/deposits/.

Savings Deposits in some currencies may pay no interest. Morgan Stanley Smith Barney LLC will charge a client a markup for converting USD in the client's brokerage account or foreign currency in a Savings Deposit to another currency, which will reduce the client's net earnings. The markup is the difference, or "spread," between the price we pay for a currency and the price at which we sell the currency to a client. Please refer to http://www.morganstanley.com/wealth-general/globalcurrencyrates for full availability.

Morgan Stanley Smith Barney LLC does not accept appointments nor will it act as a trustee but it will provide access to trust services through an appropriate third-party corporate trustee.

Securities Investor Protection Corporation (SIPC) — Morgan Stanley Smith Barney LLC is a member of SIPC, which protects securities of its customers up to \$500,000 (including \$250,000 for claims for cash). Losses due to market fluctuation are not protected by SIPC. To obtain information about SIPC, including an explanatory SIPC brochure, contact SIPC at 1-202-371-8300 or visit www.sipc.org

Federal Deposit Insurance Corporation (FDIC)—Free credit balance swept into deposit accounts at participating banks in the Bank Deposit Program are protected by FDIC insurance up to applicable FDIC limits. FDIC insurance is a federal government program administered by the Federal Deposit Insurance Corporation. This insurance covers bank deposits held in checking accounts, savings accounts, certificates of deposits and money market deposits (not money market funds). This insurance comes into play in the event of a bank failure and covers client cash up to a total of \$250,000, per bank, for each "insurable capacity" (e.g., each individual, joint, etc.). It does not cover investment products that are not deposits, such as mutual funds, annuities, life insurance policies, stocks or bonds. Refer to https://www.fdic.gov for additional details.

Cash management and lending products and services are provided by Morgan Stanley Smith Barney LLC, Morgan Stanley Private Bank, National Association or Morgan Stanley Bank, N.A, as applicable.

Banking products and services are provided by Morgan Stanley Private Bank, National Association. Member FDIC.

Morgan Stanley Smith Barney LLC is a registered Broker/Dealer, Member SIPC, and not a bank. Where appropriate, Morgan Stanley Smith Barney LLC has entered into arrangements with banks and other third parties to assist in offering certain banking-related products and services.

Investment, insurance and annuity products offered through Morgan Stanley Smith Barney LLC are: NOT FDIC INSURED | MAY LOSE VALUE | NOT BANK GUARANTEED | NOT A BANK DEPOSIT | NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY.