

Operations Overview – Mutual Fund Processing and Collective Investment Funds

This session will cover the lay of the land with respect to mutual fund processing and collective investment funds. It will also touch on risk management, including the hardships COVID has imposed on the industry and moving from desktop to in-the-cloud systems.

Bio for:



Gail Weiss

Ms. Weiss is currently the Global Chief Operating Officer and Senior Partner of Aon Investments and serves as the Chairman of Aon Trust Company LLC, an Illinois state-chartered bank. Ms. Weiss has held several other senior positions during her 30-year career.

Ms. Weiss holds the Certified Investment Fund Director designation and has served on numerous bank boards of directors.

In addition, Ms. Weiss is currently pursuing at PhD at London Metropolitan University focusing on the governance of collective investment trusts.

Agenda

- ▶ Overview of US Mutual Fund and CIT marketplace
- ▶ Operational Flows
 - ▶ DTCC and NSCC
 - ▶ FundSERV
 - ▶ Networking
 - ▶ Mutual Fund Profile
- ▶ Recent Challenges
 - ▶ COVID
 - ▶ Move from desktop to in-the-cloud systems

Overview of Mutual Fund & CIT marketplace

- ▶ Definition of a Mutual Fund and Collective Investment Trust
- ▶ Size of the US Mutual Fund market and the CIT market

Definition of a Mutual Fund

- ▶ A type of financial vehicle made up of a pool of money collected from many investors to invest in securities like stocks, bonds, money market instruments, and other assets.
- ▶ Generally, a mutual fund is structured as an "investment company" which is a company (corporation, business trust, partnership, or limited liability company) that issues securities and is primarily engaged in the business of investing in securities.
- ▶ Operated by professional asset managers, who allocate the fund's assets and attempt to produce capital gains or income for the fund's investors. A mutual fund's portfolio is structured and maintained to match the investment objectives stated in its prospectus.
- ▶ The money received from investors is invested on a collective basis, and each investor shares in the profits and losses in proportion to the investor's interest in the investment company. The performance of the investment company will be based on (but it won't be identical to) the performance of the securities and other assets that the investment company owns.

Benefits of a Mutual Fund

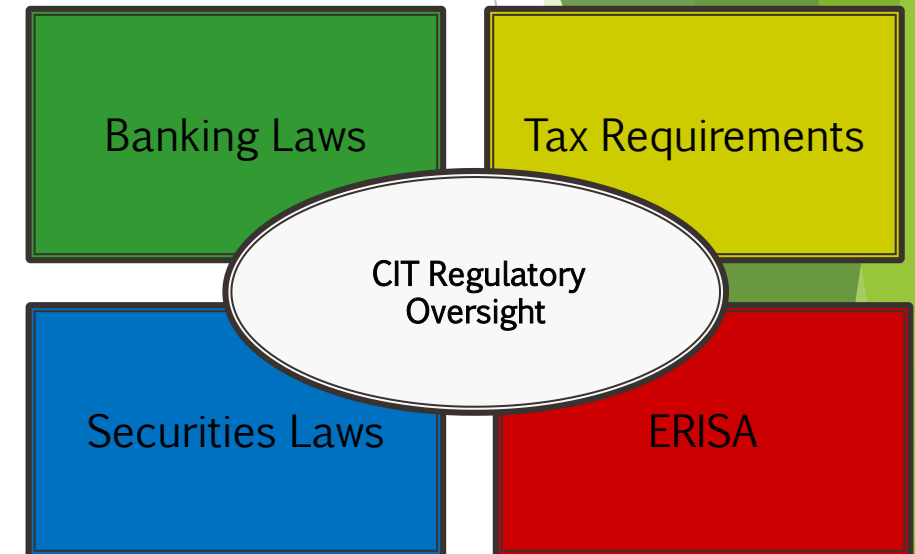
- ▶ The advantages of mutual funds include:
 - ▶ Economies of scale
 - ▶ Diversification
 - ▶ Liquidity
 - ▶ Professional management
 - ▶ Access of complex strategies not typically available to individuals
 - ▶ Government oversight
 - ▶ Transparency
- ▶ These benefits come at a cost
 - ▶ Professional management, custody, transaction processing, fund accounting, transfer agency, audit, legal, etc.

Key Mutual Fund Laws

- **Securities Act of 1933** -- Requires that all investments sold to the public, including mutual funds, be registered with the SEC and that prospective investors be provided with a prospectus that discloses essential facts about the investment.
- **Securities and Exchange Act of 1934** -- Requires that issuers of securities, including mutual funds, report regularly to their investors. This act also created the Securities and Exchange Commission, which is the principal regulator of mutual funds.
- **Revenue Act of 1936** -- Established guidelines for the taxation of mutual funds. It allowed mutual funds to be treated as a pass-through entity where income is passed through to investors who are responsible for the tax on that income.
- **Investment Company Act of 1940** -- Established rules specifically governing mutual funds.

Collective Investment Trusts

- ▶ Collective investment trusts are **bank-sponsored trusts** that are permitted to commingle assets of bank fiduciary clients as set forth in Title 12 of the United States Code of Federal Regulation - Part 9 Section 18 or **12 CFR 9.18**.
- ▶ Banks create and operate CITs without registering them with the Securities and Exchange Commission, based upon an exemption to the Securities Act of 1933 and exclusions provided in the Investment Company Act of 1940.
- ▶ Because of their bank-sponsorship, CITs are primarily supervised by either the Office of the Comptroller of the Currency (“OCC”), the Federal bank regulator, or one of the various fifty state banking regulators, and are subject to various laws and regulations.

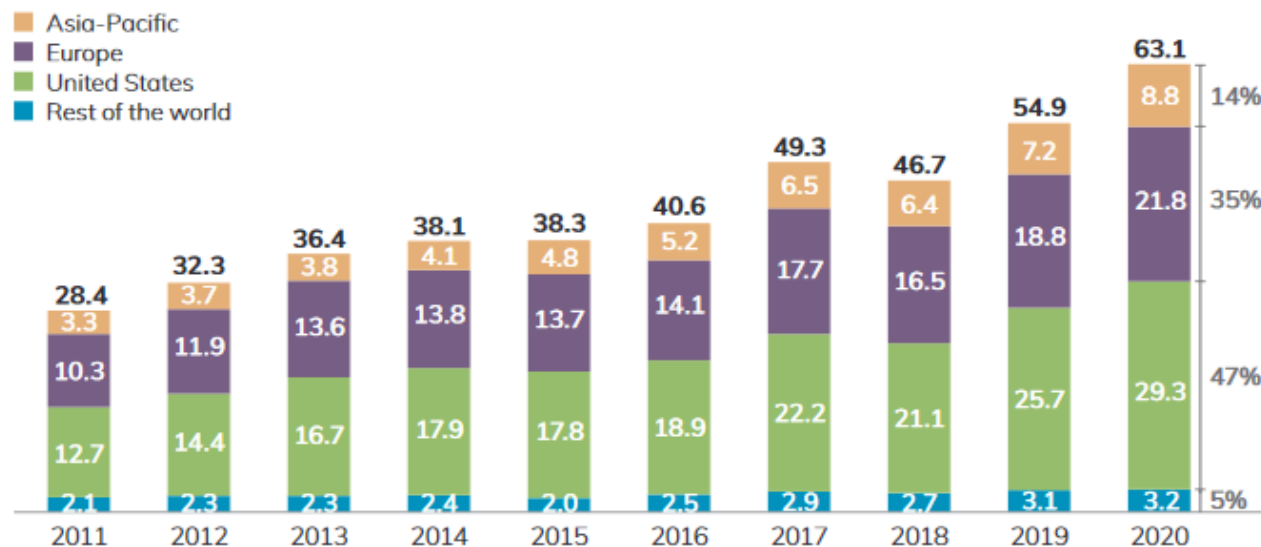


Size of the Funds Industry -- Global

- Assets vary by geographic region:
 - The United States dominates with 47% of all fund assets
 - Europe follows with 35%
 - Asia Pac holds 14%
 - Rest of the world is 5%

The United States Has the Largest Share of Total Net Assets of Worldwide Regulated Open-End Funds

Trillions of US dollars by region, year-end



Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds.

Source: International Investment Funds Association

Source: 2021 Investment Company Fact Book

Growth of CITs - Fifteen Years

- Difficult to size the CIT market
- Methodology to obtain figures
- Understated estimates
- NSCC definition issues

Security Issue Type	Description	2006	2006 % of Total	2020	2020 % of Total	% Increase
15	UIT (Unit Investment Trust)	451	1.29%	18	0.03%	-96.01%
24	Money Market Fund	96	0.28%	18	0.03%	-81.25%
25	Load Mutual Fund	17,933	51.39%	13,401	21.55%	-25.27%
26	No-Load Mutual Fund	8,632	24.73%	18,628	29.21%	115.80%
55	GIC (Guaranteed Investment Contract)	58	0.17%	1,131	1.69%	1,850.00%
56	Stable Value Fund	229	0.66%	677	0.86%	195.63%
57	Separate Account	28	0.08%	563	0.85%	1,910.71%
58	Bank Collective Investment Trust	829	2.38%	11,095	15.28%	1,238.36%
59	Offshore (NRA) Fund	2,120	6.07%	7,682	11.35%	262.36%
60	BIC (Bank Investment Contract)	2	0.01%	9	0.01%	350.00%
61	Section 529 Acct - Qualified State Tuition)	2,596	7.44%	3,972	5.53%	53.00%
62	Offshore US Dollar, Enhanced Processing	1,216	3.48%	4,611	6.55%	279.19%
63	Offshore non-US Dollar, Enhanced Processing	708	2.03%	4,604	7.06%	550.28%
	TOTALS	34,898		66,409		90.29%

Source: Gail Weiss PhD Research

Funds Operational Flows

- ▶ DTCC & NSCC
 - ▶ FundSERV
 - ▶ Networking
 - ▶ Mutual Fund Profile

DTCC & NSCC

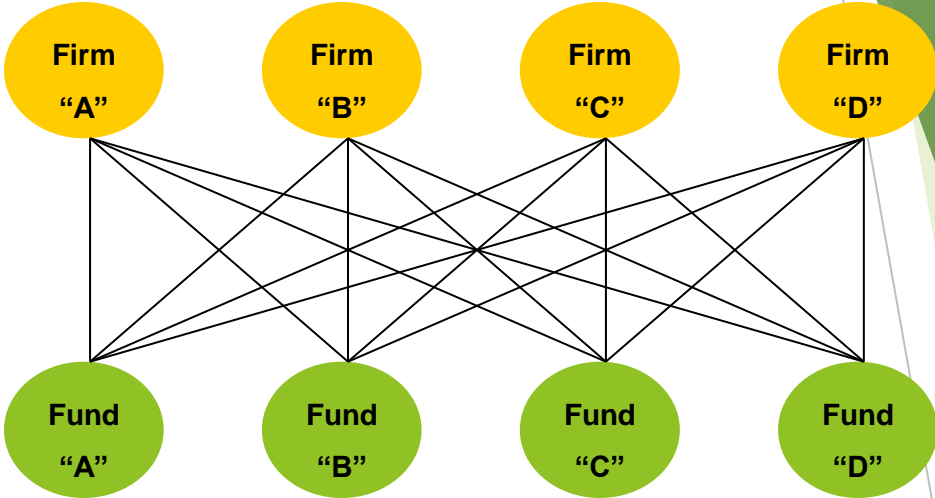
- ▶ The Depository Trust and Clearing Corporation (DTCC) was formed in 1999 with the merger of the Depository Trust Company and the National Securities Clearing Corporation.
- ▶ DTCC provides clearance, settlement and information services for a wide range of securities products, including government and municipal bonds, derivatives, mutual funds, money market instruments, alternative investment products and insurance products.
- ▶ DTCC settles the vast majority of all securities transactions in the US.

NSCC's Wealth Management Services

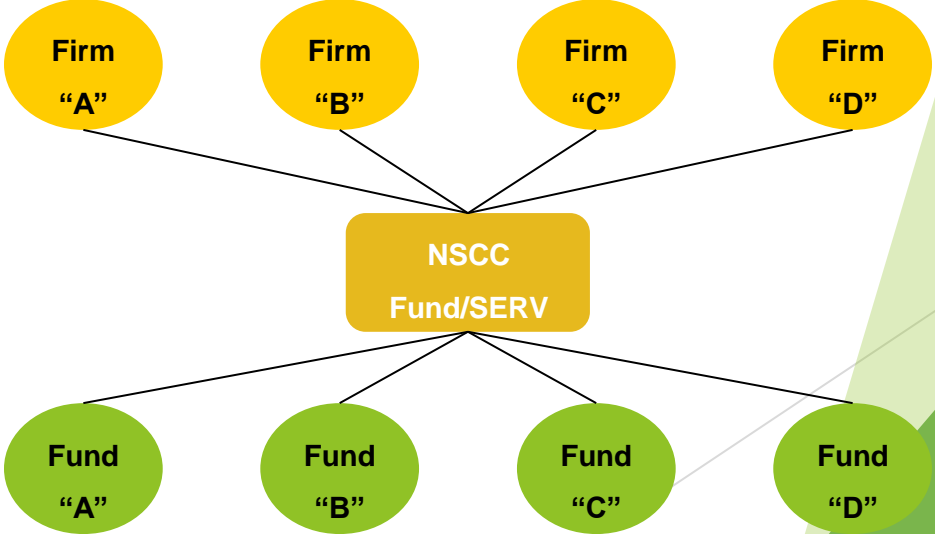
- **Fund/SERV[®]** -- the industry standard for automating the purchase, registration, redemption and settlement of fund investments.
- **Networking** -- a centralized account reconciliation service between broker/dealers and mutual funds.
- **Mutual Fund Profile Service** -- a dynamic central source for rules governing operational processing and other prospectus information.

Fund Order Trading Paradigms

Industry Prior to Fund/SERV



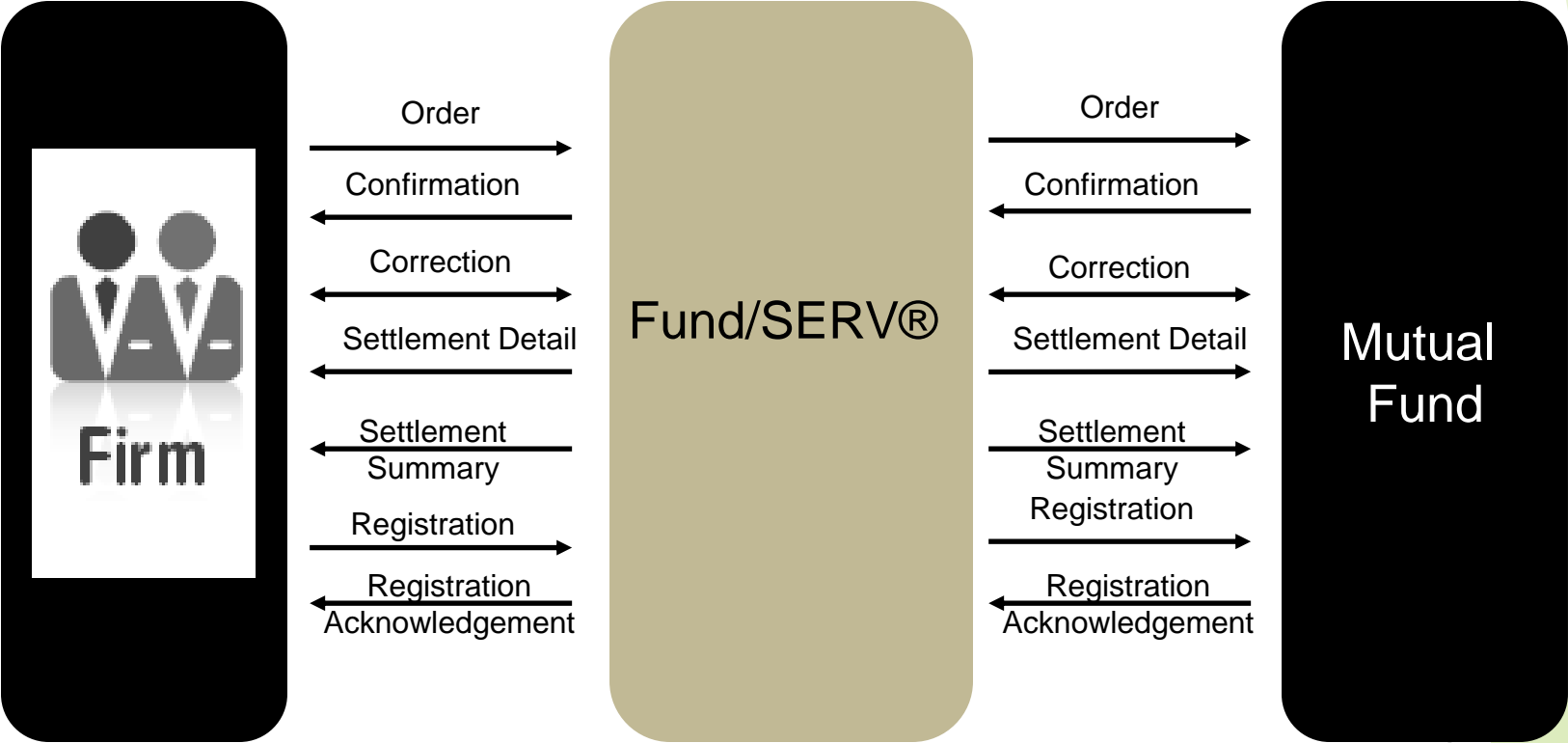
...with Fund/SERV



Benefits of FundSERV

- **Reduces Costs and Increases Efficiencies**
 - Using industry standards decreases operating costs
 - Automated, standardized procedures increase processing efficiencies
- **Centralizes USD Money Settlement**
 - Simplifies money settlement and eliminates risks associated with multiple settlement procedures
 - A single net USD settlement figure is calculated for each participant every day
- **Expands Trading Partners**
 - A single link allows users to connect with ~940 fund companies and 350 firms
 - Supports close to 65,000 securities
 - Easily accommodates **volume growth**

Fund/SERV Order Flow



Fund/SERV Cycles

- ▶ Multi-batch system available 22 hours a day from 2:00am - midnight ET
- ▶ 29 cycles in a day
- ▶ Interactive transaction processing
- ▶ Operational Monday - Friday excluding NYSE holidays

Networking Overview

- ▶ In 1988 Mutual Fund Services adds Networking to suite of products
 - ▶ Allows firms to reconcile their records and offer consolidated client statements
 - ▶ Supports industry move from physical to book shares

- ▶ Mutual funds and firms can exchange customer account information using standardized formats:
 - ▶ Account maintenance reconciliation
 - ▶ Dividend processing
 - ▶ Activity reporting
 - ▶ Position reporting
 - ▶ Transfers
 - ▶ Conversion processing
 - ▶ Year-end Tax Reporting

Networking Benefits

- ▶ Reduces reporting errors

- ▶ Account information exchange electronically
- ▶ Minimizes potential for discrepancies

- ▶ Provides identical account records at both funds and firms to track positions, calculate dividends

- ▶ Increases efficiency and savings

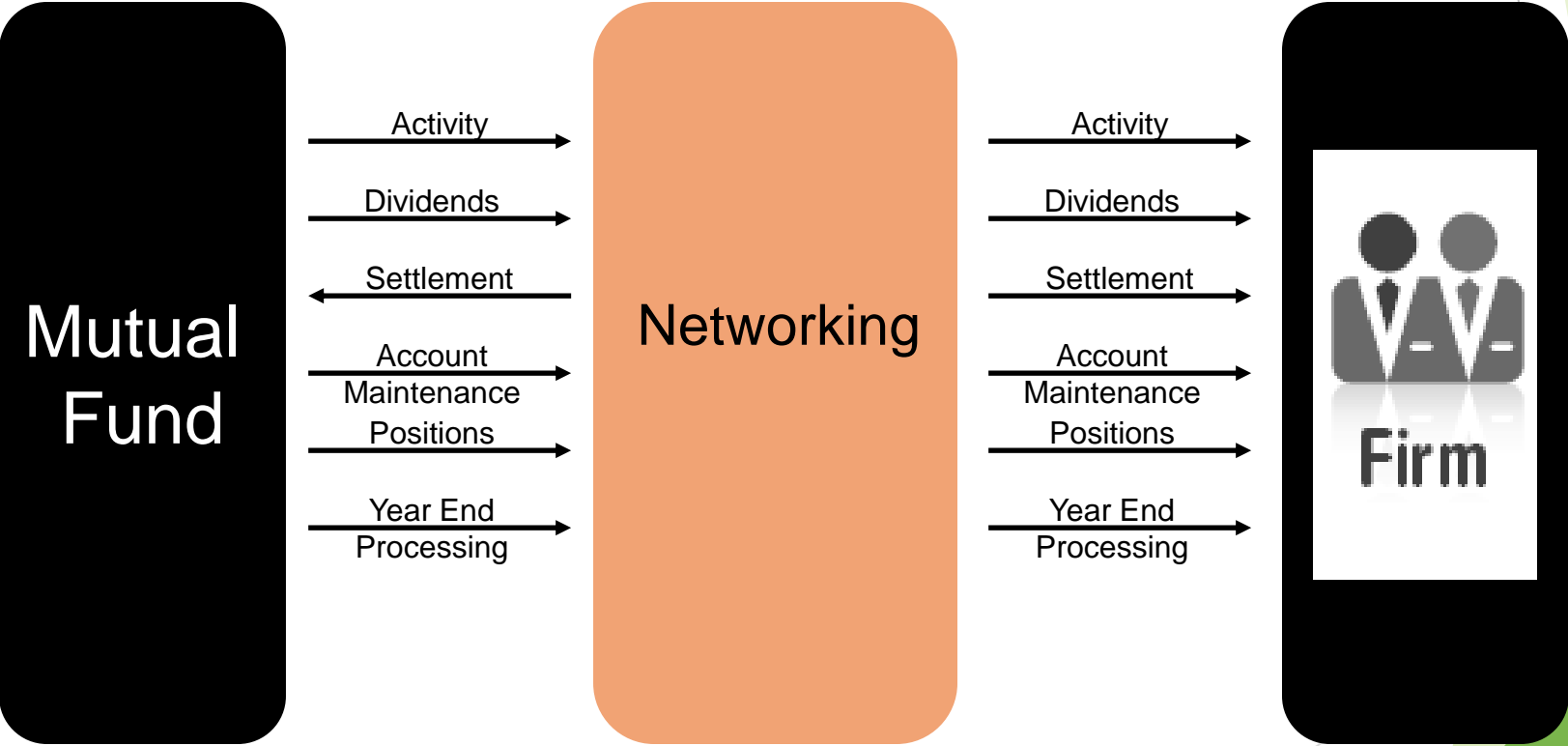
- ▶ Improves reconciliation process

- ▶ Improves customer service

- ▶ Provides access to accurate and complete customer information

- ▶ Eases dividend reporting and settlement

Networking System Flow



Position File Scheduling

- ▶ Files typically sent twice a month
 - ▶ First and third Friday/Saturday
 - ▶ Second and fourth Friday/Saturday
- ▶ Timing is scheduled with the fund family

Mutual Fund Profile

- ▶ Distribution of Prices and Rates
- ▶ Multiple cycles per day

Recent Challenges

▶ COVID

- ▶ Remote working concerns
 - ▶ People
 - ▶ Internet access stability and reliability
 - ▶ Processing delays
 - ▶ Security
- ▶ Market Volatility
 - ▶ Impact on valuation processes
 - ▶ Increase in transaction volumes
 - ▶ Liquidity management

▶ Move from desktop to in-the-cloud systems

- ▶ Security
- ▶ Redundancy
- ▶ Stability and reliability
- ▶ Scalability

Questions?

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