



The Great Growth Opportunity

Dominic Hobson, Co-lead, McLagan Investment Services

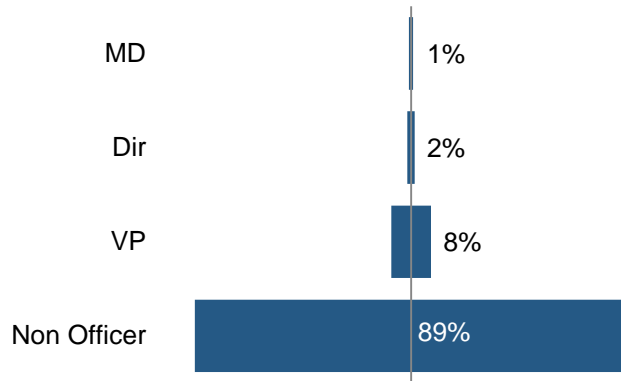
Global Custody Forum
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Prepared by McLagan

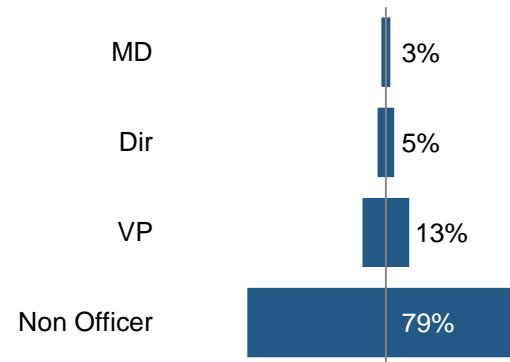
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The Management Hierarchies of the Four Largest Global Custodian Banks in 2015

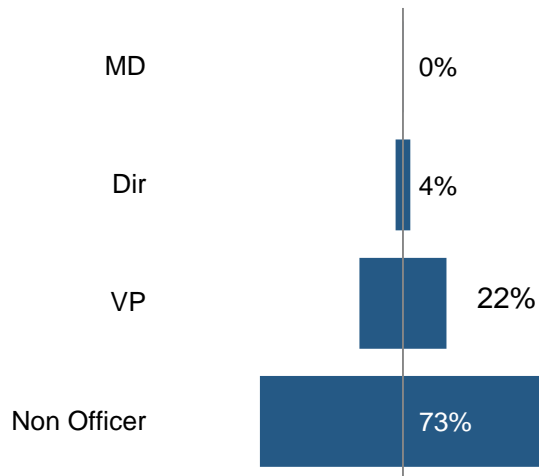
Global Custodian A



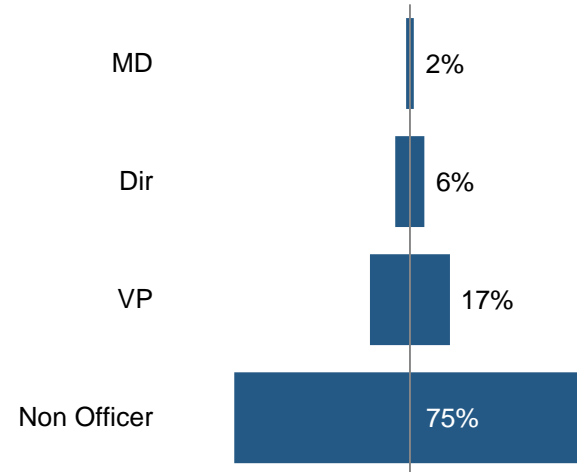
Global Custodian C



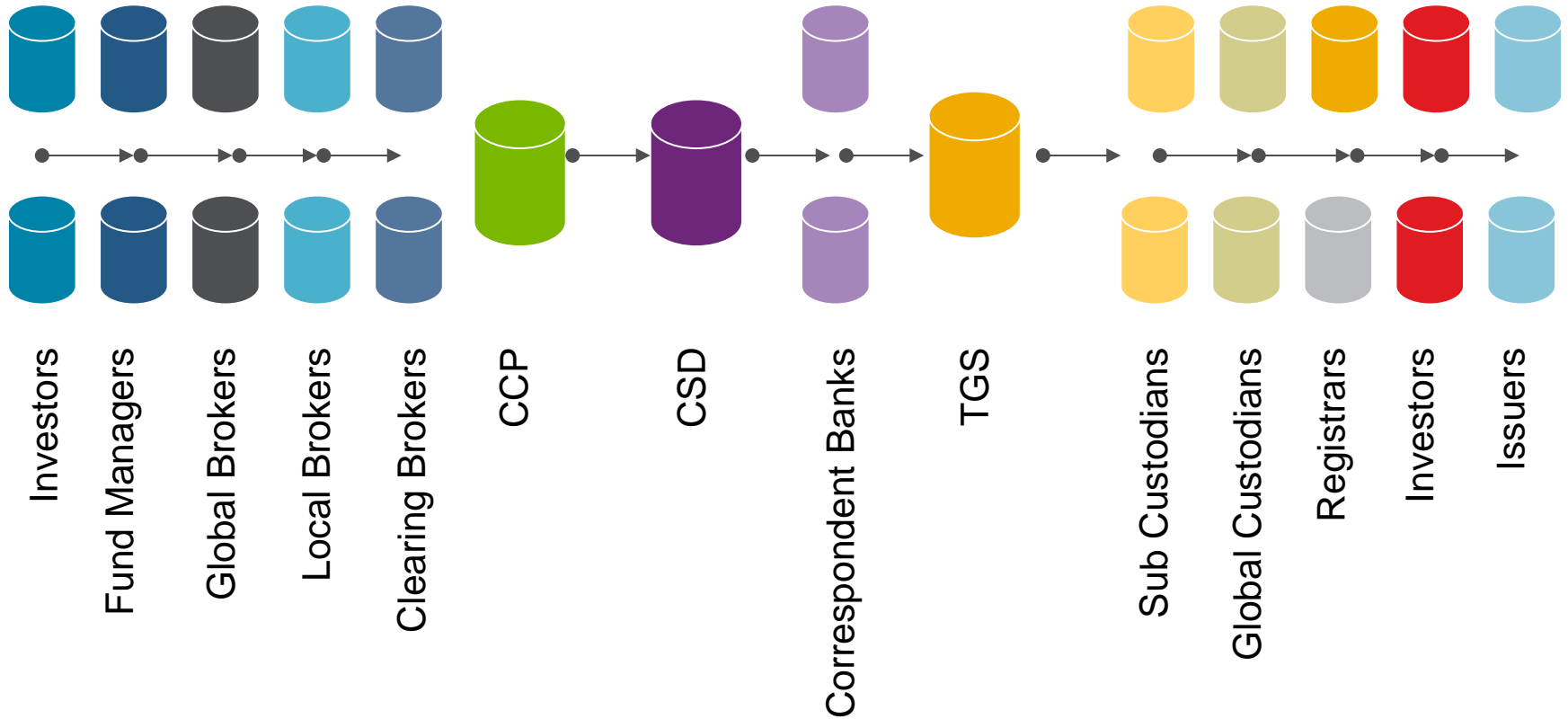
Global Custodian B



Global Custodian D



The Global Custody Value Chain



Michael Porter's Five Forces of Competition



Information Processed and Created by Global Custodians

Settlement information

1. Name of the client
2. Name of the broker
3. Account number of the client
4. Account number of the counterparty
5. Name of the security
6. ISIN number of the security
7. Trade date
8. Purchase or sale
9. Currency
10. Number of units bought or sold
11. Principal amount
12. Commissions charged
13. Taxes withheld
14. Whether the trade has settled.

Asset servicing information

1. FX trades executed
2. Corporate actions notified
3. Corporate actions instructed
4. Proxy votes delivered
5. Income collected
6. Tax reclaimed
7. Entitlements posted
8. Securities on loan
9. Collateral selected
10. Collateral optimisation
11. Collateral substitution
12. Cash collateral reinvested
13. Regulatory reports
14. Fund accounting

Digital Transactions Flows are Booming

Global flows of trade and finance are flattening, while data flows are soaring



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Digital Transaction Volumes

| | Founded | Annual transaction volume |
|------------------|---------|--------------------------------------|
| Visa | 1958 | 100.8 billion |
| Mastercard | 1966 | 48 billion |
| AliBaba | 1999 | 13 billion |
| SWIFT | 1973 | 6.1 billion |
| American Express | 1958 | 6 billion |
| PayPal | 1998 | 5 billion |
| Amazon | 1994 | 1.6 billion (packages shipped) |
| Facebook | 2004 | 1.2 billion (active users daily) |
| DTCC | 1973 | 345 million |
| Euroclear | 1968 | 191 million |
| eBay | 1995 | 165 million (active buyers) |
| Clearstream | 1971 | 138 million |
| Monte Titoli | 1978 | 66.4 million (delivery instructions) |
| VP Securities | 1980 | 16.7 million |

The Rapid Creation of Value

| | Founded | Market capitalisation | P/E ratio | Employees |
|----------------|---------|-----------------------|-----------|-----------|
| Apple | 1976 | \$586.9 billion | 13.24 | 116,000 |
| Google | 1998 | \$528.3 billion | 28.4 | 61,800 |
| Microsoft | 1975 | \$469.2 billion | 28.9 | 114,074 |
| Amazon | 1994 | \$361.2 billion | 174.15 | 230,000 |
| Facebook | 2004 | \$337.3 billion | 45.11 | 15,724 |
| J.P. Morgan | 1854 | \$282.5 billion | 13.4 | 235,000 |
| Alibaba | 1999 | \$233.5 billion | 49.35 | 36,500 |
| Citi | 1812 | \$157.8 billion | 12.06 | 231,000 |
| HSBC | 1865 | \$125.2 billion | 31.22 | 266,000 |
| BNY Mellon | 1784 | \$50.2 billion | 16.05 | 52,200 |
| eBay | 1995 | \$32.1 billion | 18.4 | 11,600 |
| State Street | 1792 | \$30.4 billion | 16.06 | 32,636 |
| Northern Trust | 1889 | \$18.5 billion | 19.4 | 16,500 |
| Twitter | 2006 | \$13.3 billion | n/a | 3,860 |

Creative Destruction

“ Capitalism ... is by nature a form or method of economic change and not only never but never can be stationary ... The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates ... The same process of industrial mutation ... incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism ... Every piece of business strategy acquires its true significance only against the background of that process and within the situation created by it. It must be seen in its role in the perennial gale of creative destruction. ”

Joseph A. Schumpeter, *Capitalism, Socialism and Democracy*, 1943, pages 82-4

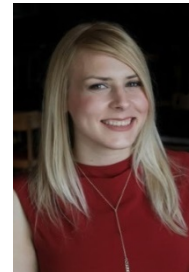
Our Team



Dominic Hobson is Co-Lead of Aon McLagan Investment Services. He was one of the founders of Asset International, a publishing and events business whose titles include *Global Custodian*, where he was for many years editor-in-chief. After Asset International was sold in 2009, Mr Hobson founded COO Connect, a peer group network for fund managers, now also sold. As an independent consultant, he has delivered a variety of projects on behalf of custodian banks and financial market infrastructures, and consulted to Instant Actions, a corporate actions verification service. Dominic has written for *Financial News*, contributed occasionally to the BBC on financial markets issues, and has three works of non-fiction to his name. He was amanuensis to Nigel Lawson, former Chancellor of the Exchequer, in the preparation of his memoirs. Mr Hobson was born in Southern Rhodesia in 1958, and educated there and at Magdalene College, Cambridge. He spent four years in investment banking before electing in 1988 to work for himself. Mr Hobson is also co-founder of the Future of Finance conference held at the Saïd Business School in Oxford, a member of the Innovate Finance Policy Advisory Board, and served on the Government Office of Science group of experts on distributed ledger technology.



Keith Amos is an Associate Partner in McLagan's London office and Co-Lead of McLagan Investment Services. Mr Amos has worked at McLagan since 2004 and heads up the financial benchmarking capabilities for Investment Services. In his time at McLagan he has worked within the Performance business (and part of TRP), having previously worked on the financial benchmarking product for Investment Banks covering the capital markets business. He relocated to New York where he spent four years in a number of different client-facing and relationship management roles. Prior to joining McLagan Mr Amos worked for a number of investment banks in mainly operational roles including time with Standard Chartered Bank, Deutsche Bank, Lehman Brothers and Salomon Brothers (at Lehman and Salomon he worked on the trading desk with a specific focus on Emerging Markets). After leaving Salomon in 1999 he joined MIB Partners, a financial benchmarking Start-Up which was subsequently purchased by McLagan Partners, an Aon Company, in 2004.



Allison Cayse is a Manager within Aon McLagan Investment Services, which she joined this year. Ms Cayse has more than 12 years' experience of the investment services industry, having joined *Global Custodian*, a trade magazine dedicated to the industry, as its surveys editor in 2004. In that role, she was responsible for the day-to-day management of more than a dozen surveys of various aspects of the investment services industry, including global custody, direct custody and clearing in major and emerging markets, central securities depositories (CSDs), hedge, mutual and private equity fund administration, securities lending and financing, and prime brokerage. In addition, Ms Cayse headed up relationship management and client services for the surveys group, and managed the technical team which scripted surveys, analysed the results and prepared research reports for clients. Ms Cayse also contributed regularly to the editorial content of the magazine, and helped to conceive, develop and manage its annual survey awards events in Hong Kong, London and New York. She is a graduate of the Scripps School of Journalism at Ohio University, where she majored in journalism, and minored in Economics and German. She also earned a master's degree in European Cultures at Birkbeck College, University of London.



Sophie Chapman Daws is a Manager in McLagan's London office and works with Mr Amos as part of the Performance business and the McLagan Investment Services team. In her role within the McLagan Investment Services Ms Chapman-Daws supports all our benchmarking efforts and capabilities from an execution perspective with additional responsibility for managing and developing the reporting and analyses we deliver to our clients. Additionally she is currently working with our partners within the Compensation team on a new initiative to develop an analyses that is able to join together the financial performance benchmarks with the detailed pay data to create a performance and reward solution to our clients. She joined McLagan in December 2013 having previously worked for Benchmarkers where she was responsible for the running of the Insurance benchmarks. Sophie graduated from LSE with a background in Mathematics and Economics.

Contact Us

Keith Amos
Associate Partner, Co-lead
McLagan Investment Services
Aon Hewitt

10 Devonshire Square
London, EC2M 4YP

t +44 (0)20.7086.5056 | m +44 (0)7714 900421

kamos@mclagan.com

Dominic Hobson
Co-lead
McLagan Investment Services
Aon Hewitt

10 Devonshire Square
London, EC2M 4YP

t +44 (0)20.7086.5145 | m +44 (0)7714 900421

dominic.hobson@mclagan.com

Allison Cayse
Manager,
McLagan Investment Services
Aon Hewitt

1600 Summer Street, Suite 601, Stamford,
CT 06905

t + 1 513.708.5136

allison.cayse@mclagan.com

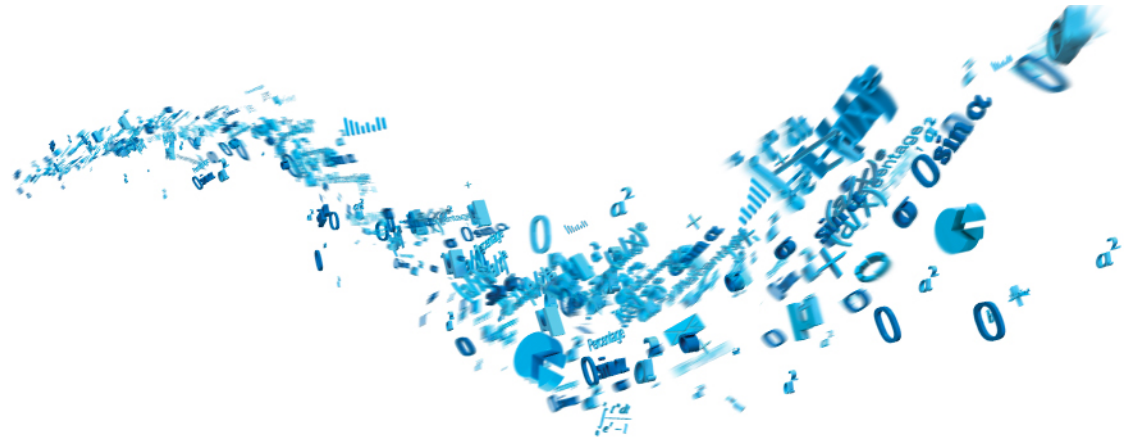
Sophie Chapman-Daws
Manager,
McLagan Investment Services
Aon Hewitt

10 Devonshire Square
London, EC2M 4YP

t +44 (0)20.7086.5110 | m +44 (0)7715 596634

sophie.chapman-daws@mclagan.com





We're here to empower results

About McLagan

McLagan provides tailored talent, rewards, and performance expertise to financial services firms across the globe. Since 1966, we have partnered with the largest and smallest financial services firms to help them make data-driven decisions to hire, retain, and engage the top talent for keeping the global economy running. Our compensation surveys are the most comprehensive, in-depth source of rewards data covering over 150 countries from more than 2,500 clients. Our consultants work with hundreds of firms annually to design total rewards programs and benchmark financial performance for boards of directors, executives, employees, and sales professionals.

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