SURVEY SERIES

Annual CFO Survey
A Business Case for Change: CFOs and the Path Forward

AGA®

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Executive Summary

Federal Chief Financial Officers (CFOs) have been working diligently not only to strengthen the financial management of their organizations, but also to improve other management areas assigned to them over time. When certain management priorities are considered significant, the trend has been to anoint another chief (e.g., Chief Information Officer, Chief Human Capital Officer), with seniority in the organization, to tackle those challenges. Sometimes the CFO has assumed these new responsibilities. In most other cases, the new roles lead to fractured management responsibilities within agencies. According to responses from this 24th annual AGA CFO Survey, federal CFOs believe it is time to rationalize the duties assigned to their offices so there is a consistent focus across the federal government to the major challenges facing departments and agencies. The results of this year's survey demonstrate a business case for change...now.

Like prior years, this CFO Survey consisted of both in-person interviews and an online survey. Over 100 CFOs, Deputy CFOs, and other federal financial leaders participated in either in-person interviews or small group discussions. There were almost 200 responses to the online survey, which consisted of 52 questions. In order to ensure candor, participants in both the in-person interviews and online survey received assurance their responses were not for attribution. Therefore, no respondents are named specifically in this report, however the list of their agencies can be found in the Appendix.

In each annual survey, we ask CFOs to name their top challenges. This year the top challenges cited included:

1. The expanding role and responsibilities of the CFO
2. The critical need for qualified financial management staff
3. Budget uncertainty
4. Technology adoption.

CFOs, and the federal financial management community in general, think the government's management and performance would improve if CFOs had a stronger, more consistent role in oversight of their agency's various management improvement functions. They also do not believe the community focuses adequately on what's required to recruit and retain the talent needed to adapt to a rapidly changing technical environment. The impact of budget uncertainty falls disproportionately on CFOs as they not only share the same consequences of delay and indecision as their program and functional counterparts, but they must manage the fits and starts of the appropriations process on behalf of the enterprises they manage. Because of these and other difficulties, CFOs are having a hard time adopting rapidly evolving technology that promises to make them more efficient and effective.

With the impending 30th anniversary of the CFO Act, there is an emerging consensus throughout the federal financial management community that the time for substantial reform is now. Unifying and broadening the responsibilities assigned to CFOs is one area ripe for amendment. There is also consideration being given to revising the requirement to produce annual, audited financial statements in favor of a more risk-based approach, one that would transfer resources away from simple reporting and, instead, focus on analysis more useful to stakeholders and decision-makers. Though no single point of view emerged on what specific amendments to the CFO Act or other legislation would affect the needed change, it was clear the debate was focused on what to change, not whether to change.

No matter what reforms emerge from the debate, the federal financial management community must come together to communicate clearly and consistently what is being proposed, and why, to the stakeholders in Congress and elsewhere. The 30th anniversary of seminal legislation like the CFO Act doesn't often occur. The time to seize the opportunity for reform is now.

Introduction

For at least 30 years, federal CFOs have been working diligently not only to strengthen the financial management of their organizations, but also to improve other management areas assigned to them over time. The CFO Act enacted in 1990 codified many CFO responsibilities, but those responsibilities have expanded. Recently, as certain management priorities emerge and are considered adequately significant, the trend has been to anoint another chief (e.g., Chief Information Officer, Chief Human Capital Officer), with significant seniority in the organization to tackle those challenges. Most recently, the Foundations for Evidence-based Policymaking Act created Chief Data Officers, Evaluation Officers, and Statistical Officials. Sometimes, the CFO assumes these new responsibilities. In most other cases, the new roles lead to fractured management responsibilities within agencies. According to responses to this year's survey, AGA's 24th Annual CFO Survey, federal CFOs believe it is time to rationalize the duties assigned to their offices so there is a consistent focus across the federal government to the major challenges facing departments and agencies. The cry for a robust reform business case has never been so clearly articulated from prior from survey results.

Background

In 2015, on the 25th anniversary of the CFO Act, the Annual AGA CFO Survey documented the changing focus of the government CFO and the concomitant change in their strategic and operational concerns. The survey documented the march toward technology and data analytics, plus changes in organizational relationships, largely through the seemingly automatic creation of new CXO for every challenge.

Over the last several years, CFOs and the larger CFO community have grown more uniform in naming concerns they have identified through the survey. It's not news that the pace of change is accelerating throughout our daily lives — a pace likewise manifested in CFO offices. The change occurring, and that which needs to occur, will significantly impact the ability of departments and agencies to successfully and efficiently meet their missions. However, CFOs express concern over the serious constraints limiting their capacity to adapt and evolve. One CFO interviewed said, "a state of confusion. Ten to 20 years ago, it was easy to link CFO responsibilities to the CFO Act. However, over the years, with the influx of new technology and automation, the CFO role and organization are changing rapidly, from a dinosaur way of operating to something entirely different."

This year's AGA CFO Survey included in-person interviews and small group meetings with more than 100 CFOs, Deputy CFOs, and other federal financial leaders. In addition, nearly 200 others responded to our online survey Participants raised four significant concerns:

1. Core responsibilities of the CFO function and whether current requirements were foreseen by the authors of the CFO Act.
2. Human capital and the critical need for qualified staff to meet the new requirements.
3. Budget uncertainty — a key concern only in recent years, as continuing resolutions (CR) and shutdowns severely disrupted management operations and mission activities.
4. Adoption of technology and tools to increase efficiency of financial operations.

Government CFOs cannot address these challenges alone. They require the support of departmental, executive branch and, perhaps, congressional leadership. But, in order to give them a fighting chance at achieving the government's vision for federal financial management, it's time to clarify the roles, responsibilities and accountability of the modern federal CFO.

Role of the CFO

Almost immediately following the passage of the CFO Act in 1990, the debate began whether the Act provided the CFO the proper authorities and tools to truly occupy a “seat at the table” with department and agency leadership. While the CFO Act mandated the existence of CFOs with certain broadly-defined responsibilities at federal agencies, the specific responsibilities and portfolios of CFOs were largely left to the discretion of the executive branch agencies in which they served. Given competing management structures, each agency crafted their CFO responsibilities differently (see **Figure 1**). Some agencies, such as the Department of Labor and the Department of Education, did not initially include budget formulation and execution as a primary CFO duty. It seems counterintuitive that budgeting — management of the request, enactment, and execution of agency spending — would fall outside the function of the CFO. Some believe those omissions had the effect of rendering hollow the title of chief financial officer at such agencies, depriving these officials of important tools and responsibilities needed to accomplish their financial stewardship missions.

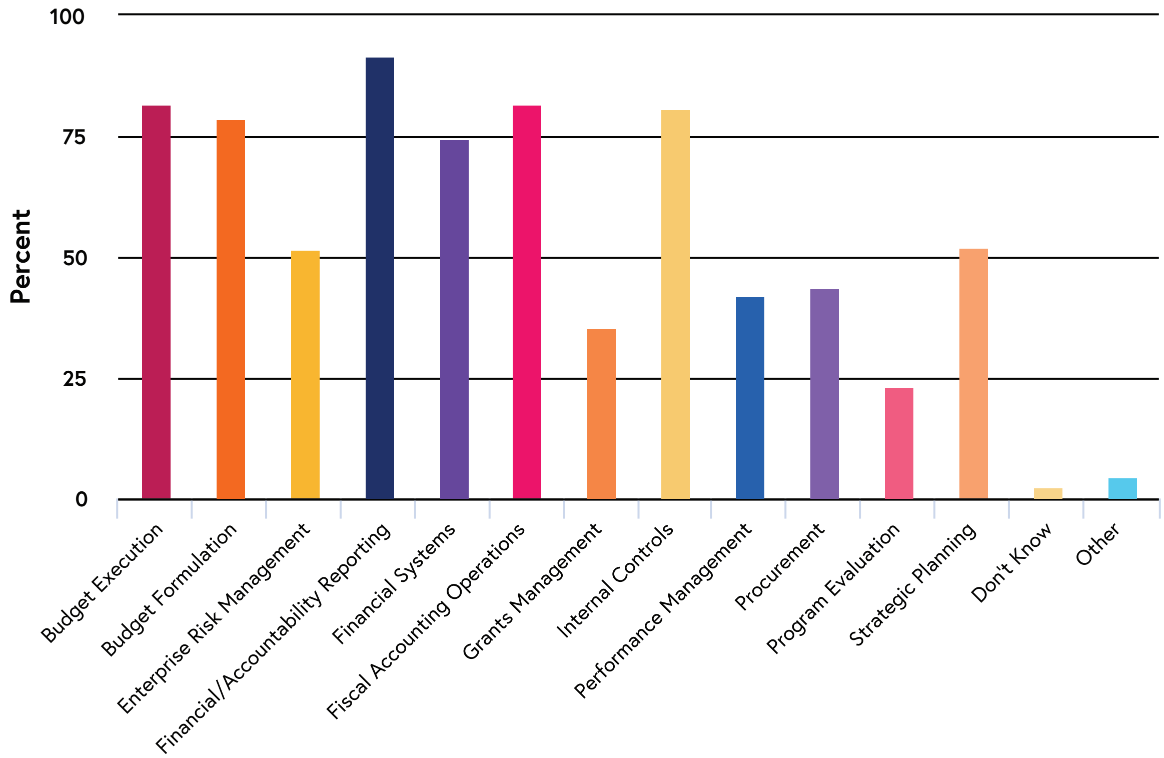
In addition to the issues surrounding the CFO’s ideal portfolio, the CFO function seems to have become a victim of the Act’s success. In the nearly 30 years following passage of the Act, Congress has followed this model whenever it sought to improve management in an area of perceived weakness. To address issues in technology, Congress created Chief Information Officers. To ensure personnel management issues were properly focused, Chief Human Capital officers were created; Chief Procurement Officers for acquisition management; Enterprise Risk Management called for Chief Risk Officers; and other ‘chiefs’.

While these are significant areas of concern, each having its own separate CXO function with a specific area of responsibility which almost always answers directly to the top, it also makes coordination across the executive suite more complex. As one respondent put it, “Every significant issue seems to motivate Congress to create another CXO.” As a result, CFOs are very concerned about their ability to pull together the comprehensive data required by decision-makers, especially in an environment where information is often siloed in separate CXO operations.

As noted in “the Chief Financial Officers Act of 1990 — 20 Years Later,” an interagency report prepared for the Congress and the Comptroller General in 2011, a strong case can be made that CFOs across the executive branch should share a standardized and consistent range of duties to include not only budgeting but also performance and planning, risk management and internal controls, financial systems, and accounting. This is a theme we continue to hear across CFO surveys from year to year and this one was no exception. Responsibility for budget formulation, in particular, “just makes sense, given that financial systems,

It seems counterintuitive that budgeting — management of the request, enactment, and execution of agency spending — would fall outside the function of the CFO. Some believe those omissions had the effect of rendering hollow the title of chief financial officer at such agencies, depriving these officials of important tools and responsibilities needed to accomplish their financial stewardship missions.

Figure 1: What functions are under the purview of the CFO's office in your organization?



data and analysis responsibility largely exists within the CFO shop." "The combination of the two would provide more value to leadership and could help advance the integration of performance, analytics and budgeting" pointed out a survey respondent. But some clearly thought CFOs should have a broader role. "CFOs should have responsibility for integrating all the CXO functions: acquisition, budget, property, grants, performance, data, human resources," said one senior federal financial management official.

No matter the scope of responsibilities, the thinking of many in the CFO community is that a more consistent distribution of duties would heighten official and public understanding of central responsibilities and enable better strategic decision-making and operational oversight. Consolidation of nearly identical functions into every CFO's portfolio would provide for information and insights akin to that of an effective chief risk officer, thereby positioning the CFO to better identify business risks across agency programs by having the full set of data and analysis such a portfolio provides.

Even though most of respondents to our survey favor amending the CFO Act to accommodate needed reforms, there are concerns about doing so. The reason cited most often for not attempting to amend the CFO Act was the fear some changes may produce unintended consequences or make things even worse. OMB could certainly mandate such consistency in CFO responsibilities without a formal legislative mandate, but a law requiring it would certainly make it easier.

Several CFOs also felt the past 30 years have demonstrated a level of success that allows a rethinking of compliance requirements in the name of efficiency. Though it wasn't among the very top challenges CFOs cited, expanding compliance requirements and unfunded mandates nonetheless remain a major concern. Getting away from reporting and compliance and moving toward more valuable services, like data analytics and risk management, seemed to be the preference of many in the federal financial community. Some indicated improper payment reporting requirements were hurting more than helping and that "more risk-based improper payment reporting would be more effective." A similar approach could be used in annual financial statement audits where agencies, especially smaller ones, were audited based on risk. The annual financial statement audits might also be assessed to determine if they are really required every year when there have been successive clean audits, a dozen or more in some cases. Under this model, internal controls reviews under OMB Circular A-123 would be emphasized, and the government financial statement would be at the Department of the Treasury (Treasury) level.

Ideas for reform of the roles and responsibilities given to CFOs are diverse. Survey respondents seem to be considering some form of the following:

- Codify a consistent set of responsibilities for federal CFOs, including budget, but also other management functions, including procurement. With such a reform, it is believed CFOs can act in the important coordinating role of a Chief Operating Officer, which is today being performed, in many cases unsatisfactorily, by the agency deputy.
- Give the Office of Management and Budget (OMB) and Treasury the flexibility to adjust the timing and content of financial statement audits. A single, government-wide audit, rather than multiple separate ones would give the federal financial management community the opportunity to focus reporting and audit resources where the risk or history of mismanagement is greatest. Smaller agencies, provided they have a demonstrated track record of sound financial management, would be relieved of producing audited financial statements every year.
- Like with financial statement production and auditing, improper payment estimating, reporting, and mitigation should be limited to those programs and activities with the highest risk of waste, fraud, and abuse. The law currently focuses fraud analytics on programs at greatest risk. It should also include the rest of improper payment elimination efforts.

No matter what reforms emerge from the debate, the federal financial management community must come together to communicate clearly and consistently what is being proposed and why to the stakeholders in Congress and elsewhere.

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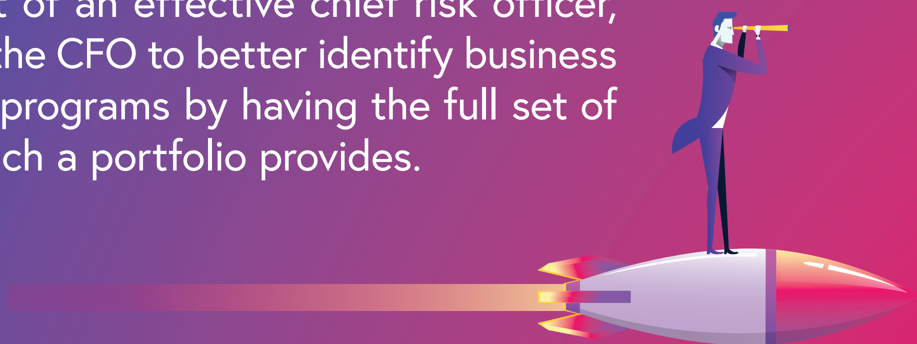


CFOs and Human Capital

When asked to name their greatest challenges, almost half of survey respondents said human capital was either the highest or second highest challenge. This and the ranking of other challenges, as shown in **Figure 2**, is consistent with findings from previous AGA CFO Surveys. So, if recruiting and retaining talent is its greatest challenge to the federal financial management community, why does it persist year after year? What actions are necessary to fix this persistent and long-term challenge?

To know what steps to take, we'll first need to better define the problem from the perspective of the CFOs we surveyed. Human capital management is a broadly defined function. In order to understand exactly what aspects of human capital are challenging, we asked for more specifics about the human capital challenge agencies were facing. **Figure 3** (next page)depicts those responses.

The three top concerns by far were (1) the burdensome hiring process, (2) the lack of competitive pay and benefits, and (3) a gap in necessary core competencies. One comment we received in the survey summarized the three issues when they wrote the following: "To be more precise: (1) A lack of a talent pipeline of recent college graduates with formal financial training; (2) leadership reticence to promote high performers at risk of leaving the OCFO to find higher paying jobs; and (3) a lack of organized and specialized training for OCFO staff."

The federal financial management community can marshal the intellectual and organizational resources necessary to tackle many of their human capital challenges. In general, public sector organizations follow more complex legislative and regulatory requirements when hiring. As a result, these processes can take longer. There are examples of special hiring authorities that allow federal agencies to adopt a less burdensome hiring process and, in some cases, the ability to hire individuals directly without having to navigate the byzantine recruitment process currently in place across the federal government. For example, in December 2010, Executive Order 13562, entitled "Recruiting and Hiring Students and Recent Graduates," created the Pathways Programs. The Department of Homeland Security has leveraged this program to create a two- to three-year curriculum and rotational experience that results not only in faster hiring, but also a more fulsome development of federal financial management competencies among new

Figure 2. Prioritize your greatest current challenges.

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Human Capital	1		789	174
Available resources/budget uncertainty	2		766	172
IT — financial or legacy systems	3		705	169
Data management/analytics	4		660	168
Expanding compliance requirements and unfunded mandates	5		529	156
Other	6		99	52

Lowest Rank Highest Rank

hires. Agencies can use these and other types of human capital flexibilities to improve their own recruiting efforts.

There is more the community can do to strengthen core competencies. We asked CFOs, “What are the most important skill sets that you would like to develop within your finance function, via either hiring or training?” The top two responses, depicted in **Figure 4**, are related to data analytics, followed by operations management and business strategy. Remarkably, this is where public sector CFOs responded similarly to their commercial counterparts. In a similar question in a 2019 survey of commercial CFOs conducted by Grant Thornton, financial managers highlighted data analytics, business strategy, and operations management as their top skill sets to develop. This is also consistent with financial leadership’s long-standing desire to move the time spent by their staff from transaction processing to data analytics.

Unfortunately, increasing budget pressures often impact training budgets first, resulting in a reduction of dollars per employee available for training. Without some mitigating action, this would have the effect of further eroding staff core competencies. Luckily, there are examples of actions taken by public sector organizations to continue to improve core competencies, despite ever reducing training budgets. Some organizations we talked with described skill assessment efforts to identify the most useful skill sets for their staffs. Then, in an effort to be more efficient with their training dollars, they would implement more structured on-the-job training and bring outside instructors on-site to conduct training sessions tailored to the organization in specific topics, such as data analytics, financial management, and leadership. This applied training accelerates the adoption of high priority skills. Examples also include tailored Certified Government Financial Manager (CGFM) training conducted by AGA on-site, at significantly lower cost than if each staff member attended the AGA training on his or her own. This tailoring approach resulted in the ability to provide the training that better met staff needs, while also reducing the overall training time and costs. The development of these training cohorts also provides lasting benefits to agencies, such as the building of affinity groups that can leverage each other’s experience in the agency.

Figure 3. Prioritize your human capital concerns regarding the workforce under your supervision.

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Burdensome hiring process	1		1,163	161
Competitive pay and benefits (e.g., telework, flexible schedule)	2		1,088	149
Staff lack necessary core competencies (e.g., financial management fundamentals, analytical skills	3		1,038	156
Inability to take action on poor performers	4		792	135
Retirement	5		789	137
Turnover	6		766	133
Low staff morale	7		726	132
Unknown	8		179	47
Other	9		160	41

Lowest Rank … Highest Rank

Finally, the appropriate use of competitive pay and benefits can be a powerful tool in the recruitment and retention of public sector financial managers. For example, when used well, telework and distributed work can be used to provide a much larger staffing pool from which to draw. By leveraging video and collaborative technology, the Federal Reserve System has staff working in eleven different states and can offer unique benefits. As a result, they can hire top talent in lower-cost regions and offer part-time schedules to retired employees where they would have otherwise lost institutional knowledge. In another powerful example of distributed work environments, the Environmental Protection Agency's regional offices have established relationships with local community colleges, even writing class curriculum for them to develop local financial managers for their regional offices.

As one online survey respondent put it, "there's a lot of opportunity to really leverage the finance function and build towards a modern CFO shop but it will take . . . a focus on developing a pipeline of folks inspired to come work in government finance by connecting with those still in school and/or looking for a new challenge and showing them the opportunity to contribute to a more engaged, efficient, and effective government function." The federal financial management community can certainly do a better job making the connection between improved financial management and how it can help federal agencies be more efficient and effective and, therefore, have a greater, more cost-effective impact. Many Americans are drawn to public service out of a desire to have a positive social impact. They get great job satisfaction out of improving educational access to students, improving Americans' health, reducing the negative impact of drugs on society, securing our country from outside threats, and many other positive social outcomes.

Aggressive action is necessary for CFOs to at long last mitigate the damage done by its inability to recruit and retain the talent it needs to lead and reform the government's financial management practices. Reforms and practices that should be considered in this effort include:

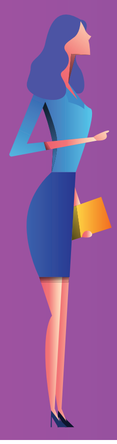
Figure 4. What are the most important skill sets that you would like to develop within your finance function, via either hiring or training?

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Data analytics	1		1,471	168
Building spreadsheets and advanced Excel	2		1,005	129
Operations management	3		862	120
Business strategy	4		854	113
AI/deep learning — application to transaction automation	5		780	112
Customer experience management	6		731	103
Innovation/entrepreneurship	7		544	87
Applications development	8		468	76
Technology acquisition	9		410	77
Other	10		92	29

Lowest Rank Highest Rank

- Development of a strategic human capital plan for federal financial management that documents the skill gaps, sets goals for filling the gaps, and tactics that can resolve the challenge.
- Creating an inventory of flexible hiring practices that can be leveraged by agency CFOs, including the Pathways Program, and adopt them broadly across the community. To the extent those flexibilities do not break the logjam in the hiring process, the federal financial management function, because of its critical role in running and reforming agencies, should be granted additional flexibility to hire more quickly the talent it requires.
- Development of pay and benefit tools to ensure agencies can attract top financial management talent. Many, like flexible work arrangements, exist today. But the ability to pay additional benefits would strengthen recruiting and retention of financial management staff.

The federal financial management community is not alone in suffering from seemingly intractable human capital challenges. But there are numerous examples of organizations that have taken action to solve some of the human capital challenges mentioned above. Leveraging these examples of successful action, public sector organizations can harness the promise of delivering social good as a powerful and effective recruiting and retention tool.



"There's a lot of opportunity to really leverage the finance function and build towards a modern CFO shop but it will take . . . a focus on developing a pipeline of folks inspired to come work in government finance by connecting with those still in school and/or looking for a new challenge and showing them the opportunity to contribute to a more engaged, efficient, and effective government function."

The Budget Process

Whether you ask CFOs about their current challenges or their long-term challenges, budget uncertainty is always near the top of the list. Responses to the CFO Survey make clear that budgets reign supreme (**Figure 5** and **Figure 2**, page 9)in the public sector, given that funding a program, project or activity is the main way to achieve public policy objectives. The American republic was, in fact, designed to ensure an important role for budgeting in addressing public needs. The legislative branch is constitutionally granted the power of the purse and the executive branch is expected to report on expenditures periodically. While CFOs have, without exception, taken the lead role in financial reporting, the administration of budgeting duties has been less consistent across the executive branch.

As we heard repeatedly from survey respondents, budgets have become the main way to get things done. "Change is most readily achieved through the budget; it is often the best opportunity to get needed legislation in place," remarked a participant in a 2019 CFO Survey roundtable discussion. "Playing a key role in the budget process is vital if we are to be, in fact, Chief Financial Officers," said another.

As noted in "The Chief Financial Officers Act of 1990 — 20 Years Later," an interagency report prepared for the Congress and the Comptroller General in 2011, a strong case can be made that CFOs across the executive branch should share a standardized and consistent range of duties to include not only budgeting but also performance and planning, risk management and internal controls, financial systems, and accounting. That is a theme we continue to hear across CFO surveys from year to year. Responsibility for budget formulation, in particular, could "help advance the integration of performance, analytics and budgeting" pointed out by another survey respondent.

Apart from ensuring CFO's have formal responsibility for budgeting, survey respondents indicated that the federal financial management community — led by CFOs — should also play a lead role in reforming the current budget process. There appears to be a growing desire to see the budget process improved. Not only have the President and Congress been unable to reach timely agreement on a budget — the last on-time government-wide budget occurred in 1997 — but the process has eroded to a point where the House of Representatives and the Senate cannot even reach agreement on a concurrent budget resolution setting high-level spending plans to kick off the congressional process.

Survey responses and conversations with the CFO community often cited budgetary dysfunction as a major obstacle to sound financial planning and management. In fact, in the 40-plus years that the modern budget process has been fully in place, it has produced an on-time budget only four times and has yielded 186 CRs — temporary funding measures used when appropriations bills have not been passed by the beginning of the fiscal year. CFOs were also quick to point out that there have been 20 funding lapses,

Figure 5. Prioritize what you anticipate being your greatest future challenges.

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Human capital	1		779	170
Available resources/budget uncertainty	2		768	172
IT — financial or legacy systems	3		675	165
Data management/analytics	4		640	165
Expanding compliance requirements and unfunded mandates	5		572	160
Other	6		99	49

Lowest Rank Highest Rank

when the lack of appropriations for agency operations has sometimes resulted in a shutdown. That was the case during fiscal year 2019 when significant portions of the government were shut down for 35 days.

"The failure to pass budgets, government shutdowns, and debt-ceiling crises do nothing but erode citizen trust," remarked one CFO Survey roundtable participant. It was emphasized that funding delays and uncertainties adversely affect the proper planning and execution of major programs across government. That process is made more difficult when agencies don't have operating and program budgets until deep into the fiscal year. "The process of running programs and getting money out the door during the course of a full fiscal year is challenging enough, but when those activities are crammed into a partial year, all bets are off in terms of sound management," continued the same roundtable participant.

The notion of taking on more sophisticated work — like performing the types of data, risk and programmatic analysis needed to assess agency and program performance — is even more daunting. CFOs continually express a point of view that more certainty in the budgeting process would help provide agencies with the flexibility to focus on those bigger, and in many respects, more important analytical and planning exercises. "We certainly try to use evidence in our budget formulation process . . . it's more than just the CFO, we need the program staff involved, assessing mission risk and priorities," reflected one respondent.

Regardless of those significant near-term operational concerns, perhaps more significantly, the budget process currently in use has been unable to limit runaway deficits and the creation of a structural budgetary imbalance expected to persist for decades to come. Problems with the budget process are extensive and survey respondents pointed out several shortcomings such as:

- Deadlines are routinely missed, leading to crisis-driven budgeting
- The budget focus centers on the short term at the expense of longer-term strategic priorities, and
- The budget formulation process has become aspirational rather than a serious financial planning exercise.

Beyond those shortcomings, a tremendous growth in the availability of data provide opportunities for enhanced transparency and accountability. While the government has made strides in recent years toward the use of evidence-based

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decision-making, much remains to be done. CFO Survey respondents generally agreed that taxpayers would benefit if agencies were compelled by a new statutory process to submit budget requests backed with empirical data showing operational and programmatic costs of initiatives, first-order outputs yielded by such spending, along with broader estimates of expected outcomes and impacts under various funding scenarios. Alternative budgeting constructs — even the types of zero-based systems previously deemed unworkable due in part to a lack of data — could be enabled with the existence of plentiful performance information. Applying performance principles to government that require the use of evidence and hard data would help ensure "sound rationales are used to allocate taxpayer dollars, rather than a reliance on gut instincts and intuition — an obsolete form of management if ever there was one," as one roundtable participant remarked.

Consistent with past survey reports, CFOs have expressed a sincere interest in operating as forward-looking strategists and data scientists rather than simply transaction processors. Their perspective could morph to dispassion about agency programs with taxpayers as primary stakeholders. CFOs could then apply rigorous analysis to promote transparency, quantify fiscal implications of policies and assess program effectiveness — all within the context of new budget procedures. Budget process reform ideas are wide-ranging and include a potential set of broader reforms that could be considered if a wholesale revision of the Congressional Budget Act was considered. But even without that, more tactical reforms could be considered in the context of updating the CFO Act. A few budget process reform ideas, frequently mentioned by CFOs during the conduct of the survey (in 2019 and in previous years), include the following:

- **Move fiscal year start to January 1st.** From a prudent financial management point of view, the notion of shifting the start of the fiscal year to correspond to the calendar year has great appeal. Such a shift would give the Congress almost a full year to complete the budget process, particularly if the President's budget request continues to be submitted in February. Assuming the move would result in more on-time budgets, a more professional and reasoned execution of budgets could occur. Such a move might also enhance public understanding of fiscal matters, as any confusion between fiscal and calendar years would end.
- **Biennial budgeting.** While shifting the start of the fiscal year to January 1st would facilitate on-time budgets, the move to biennial budgeting would put the budget timeline on the same timeline as the congressional election cycle. Such a move would allow the Congress simply to pass a single budget every two years, instead of fighting budget battles throughout each year and provide agencies with much more budgetary certainty once biennial budgets are adopted.
- **Automatic CRs.** In the event an agency's budget is not in place prior to the beginning of a fiscal year, funding should be automatically provided at the prior year's level. Such a procedure would eliminate the risk of government shutdowns and eliminate career civil servants from serving as pawns in seemingly endless budget battles.

While several legislative measures have been considered in recent years to reform the budget process, none have been proposed by the federal financial management community. Perhaps such a CFO-led, good government perspective could serve to help kick start the conversation for 2020 and beyond.

Adoption of Technology

CFOs are being asked to do more in providing actionable data to leadership, while often still managing staff originally hired to process financial transactions. As a result, they have been increasingly turning to the tools and efficiencies technology and shared services can provide to help bridge the gap.

When looking at the challenges over the next five years, the impact of adoption of data analytics tools scored significantly higher than any other area in our survey (**Figure 6**). Data visualization scored second for this time period. CFOs are dealing with the basic challenge of turning the huge volume of data they possess into useful information for decision-makers and stakeholders.

CFOs continue to see a critical need for data analytics, the government equivalent of business intelligence in the private sector, to help in managing and utilizing the data they possess. The adoption of analytics is hampered by the inability to attract and retain staff with the requisite skills. Since CFOs do not believe they can compete with the private sector, they are forced to move slowly. They often must rely on contractor staff to provide the necessary skill sets. This reliance on the private sector results in two challenges: (1) funding, which is already a shrinking asset, must be diverted for this purpose; and (2) the CFO must find the capability to properly identify the requirement for procurement purposes, and then manage the contractor as well as integrate their activities into the overall reporting process.

The same barriers present themselves as CFOs address other technology tools. While there are growing pockets of innovation, broad adoption lags. Robotic process automation (RPA), has generated a great deal of interest in the CFO community. Many CFOs have dipped their toes in the robotics waters through pilot implementations. These have usually focused on automating basic, manually intensive and repeatable processing activities, such as processing vendor payments or travel vouchers. While RPA has been routine fare at government financial conferences for several years, its use has not yet hit a tipping point which would result in widespread adoption. Some departments and agencies, such as the Department of Housing and Urban Development (HUD) or the General Services Administration, have established specific goals for the adoption of robotics. These include aggressive targets for reducing the number of work hours formerly invested in manual tasks. Others are moving more cautiously, identifying the lack of resources and other pressing priorities.

While innovation in RPA pursued independently by departments has been instrumental in identifying practical use cases, most CFOs see a need for more coordination and an exploration of common standards to ensure these pockets

Figure 6. There are many new approaches and technologies that are emerging that can impact financial management operations. Please rank the technologies that you believe will have an impact on your office's operations within the next five years.

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Data analytics tools	1		1,145	186
Data visualization techniques	2		781	156
Robotic process automation	3		683	139
Movement to shared services provider (internal or external)	4		672	141
Artificial intelligence	5		560	135
Distributed ledger technology (blockchain)	6		421	119
Other	7		78	41

Lowest Rank ... Highest Rank

of innovation are not reinventing many wheels, but instead, are working on common problems which can be adopted across departments. Picking what technologies to test and adopt will be a growing challenge for federal agencies.

After decades of focus and slow progress, shared services still rates as the third most significant technology challenge facing CFOs over the next five years. While success has been achieved with some common processes, like payroll and payments, HUD remains the only department-level system supported by a shared service provider. There are some ongoing initiatives to realize savings by creating shared services within departments and standardizing and consolidating efforts within the agencies. These promise to reduce redundancy and increase efficiency. However, the achievement of a return on investment for departments to migrate their systems externally has proven elusive, and the appropriations process makes it difficult to maintain an existing system while simultaneously funding the migration to a new platform. As one CFO stated, "Shared services is . . . not a great value proposition . . . it has not proven to be a cost saver." Perhaps the real opportunity in shared service is the sharing of precious, high-quality data analytics for specific functions (e.g., travel, payroll, grants, etc.)? Another, major user of shared services, was concerned by the "(1) lack of services relative to need (e.g., would like more cost effective options and support for grants) and (2) lack of interoperability across providers, specifically finding difficulty in mix and matching services among multiple providers."

While the return on investment may not be present at the department level, at least not for any realistic time frame, there is little doubt of the potential for savings government-wide from the adoption of shared services. As a result, it has been amply demonstrated that the shared services effort will require centralized direction. To spur the adoption of shared services, the President's Management Agenda created a framework to better guide the transition to shared services across the government. It identifies Sharing Quality Services as a Cross Agency Priority (CAP) goal. OMB Memorandum M19-16 implements the strategy through the establishment of Quality Service Management Offices (QSMO) for each desired shared service.

QSMOs are intended to ensure the marketplace exists for the services and assist departments and agencies in transitioning to them, or to help them make a business case for OMB where there is no adequate provider. The process has found support within the CFO community to date. One characterized the new framework this way, "QSMOs are not designed to be shared service providers, they are more about service management. This has been missing –— to make sense of the marketplace and drive it and have sufficient supply to meet demand."

There has been too little debate regarding the potential demand for shared services. However, the return on investment has not always been apparent at the department level, and there was not an adequate supply of providers with the capability to address the complex requirements of department level functions. Taking the cost/benefit analysis to the government-wide level, identifying a funding mechanism, and centrally overseeing departments' migration to shared service providers offers a real opportunity for success.

Technology will continue to advance beyond agencies' ability to adopt it unless CFOs take a more active role in ensuring modernization is applied more aggressively in their organizations. To take greater advantage of those advances, the federal financial management community should consider:

- Formalizing the process of piloting and scaling technology across the community. Like with RPA, certain agencies could prove the concept in their operations. But, once proven, other agencies should more rapidly adopt those practices.
- Though human capital challenges impact all facets of federal financial management, they are particularly acute in the technology arena. CFOs should consider developing a cadre of professionals with specific skills who can move across the federal management community – transferring temporarily from agency to agency – to provide surge capability or technology adoption support when needed.
- OMB, Treasury, and GSA should move expeditiously to name agency leads for all QSMOs so they can begin to lead the identification and adoption of technology and practices that can strengthen management in specified shared services.

Every organization struggles to keep pace with rapidly evolving technology. Industrious agencies have led the way in piloting practices. CFOs should monitor these practices closely to learn what can have the biggest impact on their financial management operations.

Conclusion

Following years of consistent concerns within the CFO community, a business case must be made to address the most significant challenges facing the CFO, specifically:

- The organizational question of what are the appropriate CFO responsibilities going forward
- The critical need to hire and retain staff qualified to address the needs of tomorrow, not those of 1990
- The ever-growing need to alter the current trajectory of the federal budget process
- The need to efficiently identify and adapt new technologies across the government.

CFOs are at the forefront of change within departments. They want to innovate. They need to continuously evolve.

No matter what changes to the roles and responsibilities of the CFO emerge from the debate or what budget, human capital, or technology reforms are suggested, the federal financial management community must come together to communicate clearly and consistently "what is being proposed and why" to the stakeholders in Congress and elsewhere. An anniversary of seminal legislation like the CFO Act doesn't frequently occur. The time to seize the opportunity for reform is NOW.

Appendix

In-person interviews took place at the following agencies:

Federal Deposit Insurance Corporation (FDIC)
Federal Reserve System (FRS)
National Aeronautics and Space Administration (NASA)
National Science Foundation (NSF)
Office of Management and Budget (OMB)
Pension Benefit Guaranty Corporation (PBGC)
Smithsonian Institution (SI)

United States Agency for International Development (USAID)
United States Consumer Product Safety Commission
United States Department of Agriculture (USDA)
United States Department of Commerce (DOC)
United States Department of Defense (DoD)
United States Department of Energy (DOE)
United States Department of Health and Human Services (HHS)
United States Department of Homeland Security (DHS)
United States Department of Housing and Urban Development (HUD)
United States Department of Justice (DOJ)
United States Department of Labor (DOL)
United States Department of State (State)
United States Department of the Treasury (Treasury)
United States Department of Transportation (DOT)
United States Department of Veterans Affairs (VA)
United States Environmental Protection Agency (EPA)
United States General Services Administration (GSA)
United States House of Representatives (USHOR)
United States Small Business Administration (SBA)

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