A Class for Cash

Planning to Pay the Way

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Money is the sinews of war, and without a military chest, it is next to impossible to employ an Army to effect.

—Maj. Gen. Nathanael Greene, Quartermaster General of the Continental Army

The U.S. military recognizes the paradigm that "cash is king" by doctrinally utilizing the Lykke Model to determine the level of risk associated with achieving ends (objectives) based on the available ways (concepts or options) and means (resources) to shape outcomes.[1] Often, the resources that shape outcomes originate from cash. Several recent articles, including one published by a former commandant of the Army Finance and Comptroller Corps, echo the critical importance of cash to executing military operations, including large-scale combat operations.[2] These relevant discourses underscore unified action in a contested sustainment operating environment where an electronic funds transfer (EFT) is not assured and recommend incorporating the commodity of cash as a class of supply. While relatively specific, the proposal requires further development to generate an in-depth framework for sustainment planning for payments at the point of need. The following examination refines the establishment of cash as a class of supply in part one by reflecting on the enduring nature of resourcing conflicts, discussing funding accountability, contemplating the goal of data advantage, and overviewing financial management within the sustainment warfighting function (WfF). Then, in part two, the analysis finds intersections among the classes of supply, aspects of U.S. money supply, and U.S. military funding execution to delineate a framework that aims to mitigate resource shortfalls by establishing cash as the eleventh (XI) class of supply.

Part One: Background, Goals, and Functions

Resourcing conflicts. Every war, from the American Revolution to the Global War on Terrorism, consumed resources. It is not a leap to conclude that resources enable not only war but also military operations in general. Means come in a few primary forms: time, political will, funding, personnel, supplies, and equipment.[3] Of these forms, the overall examination focuses on how funding sustains military operations and accentuates the importance of military financial management. This inquiry involves converging the elements of sustainment before offering a way to transform sustainment planning. In that sense, investigating the cost of past wars is more about recognizing the enduring nature of resourcing conflicts, the scale of wartime funding in a short period, and the direct utility of cash.

The reflection starts with gaining a perspective on the previous monetary costs of U.S. wars. Expenses of the two most recent wars are more straightforward to compare based on purchasing power and equipping. Inflationary conversions to 2011 dollars for most conflicts offer background and produce the figures in table 1.[4]

Digging into the fiscal specifics of each conflict could yield a bounty of insights; however, the more important takeaways are (1) monetary resources play a role in every conflict, (2) war can create significant costs in a short time, and (3) cash circulates on the battlefield of every contingency. These factors lead to an outlook that financial management should garner emphasis during the operations process—planning, preparing, executing, and assessing.[5]

A vital part of financial management operations is providing payments, and significant amounts of the totals spent in the indicated conflicts were cash

(Photo courtesy of the U.S. Treasury Department)

Table 1. The Cost of U.S. Wars

War	Years	Cost (2011 dollars)
American Revolution	1775–1783	$2,407 million
War of 1812	1812–1815	$1,553 million
Mexican War	1846–1849	$2,376 million
Civil War: Union	1861–1865	$59,631 million
Civil War: Confederacy	1861–1865	$20,111 million
Spanish-American War	1898–1899	$9,034 million
World War I	1917–1921	$334 billion
World War II	1941–1945	$4,104 billion
Korea	1950–1953	$341 billion
Vietnam	1965–1975	$738 billion
Persian Gulf War (Deserts Shield & Storm)* *Ally contributions estimated up to $97.3 billion in 2011 dollars	1990–1991	$102 billion
Post-9/11: Iraq, Afghanistan & Other Related Operations** **Estimate of additional $3,742 billion in associated costs (State Department, Homeland Security, veteran's care, national debt interest, and increases to defense base funding)	2001–2011 through 2023	$1,147 billion $5,843 billion

(Table by author; modified from Stephen Daggett, *Cost of Major U.S. Wars*)

payments. Two of the more recent contingency operations offer context. Between Iraq and Afghanistan, U.S. military cash transports were $400 million a month in 2003, $192 million a month in 2009, and $42 million a month in 2010.[6] From 2004 to 2015, the U.S. military disbursed $7.8 billion in Iraq and Afghanistan through the Commander's Emergency Response Program alone.[7] The nature of small-scale Commander's Emergency Response Program projects and vendor skepticism of banks often resulted in cash payments. There is also the anomaly of up to $12 billion in cash transported to Iraq by the U.S. military between May 2003 and June 2004 from the United Nations' oil-for-food program.[8]

The volume of cash payments in Iraq and Afghanistan demonstrates the contemporary relevance of cash in immature or degraded environments. Cash is indispensable when banking infrastructure is insufficient or only cash payments are accepted. The Persian Gulf War (Operations Desert Shield and Desert Storm) further validates the role of cash in an operation, particularly when setting a theater. During this example of a large-scale combat operation, the XVIII Airborne Corps Finance Group disbursed $560 million of cash in the first 190 days (12 August 1990–18 February 1991).[9] Afterward, the commander of Army Central Support Command cited the XVIII Airborne Corps Finance Group as instrumental to operational success.[10]

Funding accountability. The sticking point to the free flow of funding is maintaining accountability. Reviews of substantial, sometimes exorbitant, financing for U.S. wars are abundant. This coverage offers a stockpile of findings, recommendations, and lessons learned. The unfavorable assessment of U.S. military financial management during wars overwhelmingly indicates a need for improvement, a track record of woeful unpreparedness, exclusions from the operational planning phase, and a pattern of the same issues repeating in each conflict.[11] These past deficiencies led to a shift in the American mindset, and one writer concluded that "spending during World War II was characterized as an open checkbook. However, today Congress and the American public demand full accounting of taxpayer dollars—even during war."[12] These expectations stem from justified concerns about past performance, and an approach to meet the expectations is to connect cash directly to supply purchases. The U.S. Government Accountability Office publicly declared that it could not determine the cost of Operation Desert Storm due to unreliable military systems for managing inventories, procurements, and expenditures.[13] The Department of Defense (DOD) also found itself unable to respond to Congress about Gulf War costs and resorted to a nondisclosure policy.[14] Post-9/11 costs prompted scrutiny based on questionable expenses and insufficient accountability, as reported by the Government Accountability Office and special inspector generals.[15] Learning from historical funding accountability issues presents an opportunity to get better. Recent results highlight DOD's overall challenge after failing financial audits for the past thirty-three years; however, the conclusion of fiscal year 2024 shows signs of financial transparency improvement that some claim will help win wars.[16] The prospect of achieving a clean audit, with potential benefits to warfighting, supports any effort to learn from history and take the necessary steps during the operational planning phase of the next conflict to maintain funding accountability. Tracking cash use from start to finish is a key component of that endeavor.

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Creating data advantage. Information age tools should make achieving funding accountability more attainable than ever. Tools such as cloud computing, artificial intelligence, and machine learning should offer the ability to advance to data and even decision advantage. The DOD, including the Army, aims to transform itself into a data-centric organization that generates data and decision advantages.[17] The backbone of informing data-centric organization decisions is timely user inputs of quality data and standardized data architecture. In this vein, Army logisticians are leveraging information systems to develop predictive logistics.[18] Financial managers can enhance decision advantage by seamlessly exchanging data with interrelated sustainment information systems and with the general ledger using the standard line of accounting.[19] The push for the Enterprise Business System-Convergence leans toward that outcome.[20] Similar to the ideas of smart power and smart logistics, unifying the operating picture of the sustainment WfF through data makes smart sustainment a possibility.[21]

The sustainment warfighting function. The sustainment WfF, according to Army Doctrine Publication 4-0, *Sustainment*, "is the related tasks and systems that provide support and services to enable freedom of action, extend operational reach, and prolong endurance."[22] Logistics, personnel services, financial management, and health services support are the four elements responsible for planning, preparing, executing, and assessing the related tasks within the sustainment WfF.[23] Given that the tasks and systems are related, it only makes sense that the elements should not function in silos. The struggles of the past show what occurs when the elements are disconnected. Moreover, the means for all the sustainment elements emanate from the financial management competencies of resource management and finance operations to fund the force. A lack of means in the Lykke model is a source of risk to the mission or force. The Army cannot run without resourcing its responsibilities as directed under Title 10 of the U.S. Code.[24] Nor can the Army achieve its strategic roles to shape operational environments, prevent conflict, prevail in large-scale ground combat, and consolidate gains in support of the joint force.[25] Army Regulation (AR) 1-1, *Planning,* *Programming, Budgeting, and Execution*, establishes the phases of the planning, programming, budgeting, and execution (PPBE) process for financial managers to, at the end of the process, perform funding execution to provide monetary resources.[26] Army Doctrine Publication 4-0 identifies resources as fundamental, which is the case since sustainment elements require fiscal resources to acquire goods and services.[27]

The logistics element tasks include conducting supply, resupply, transportation, and operational contract support at the operational and tactical levels of warfare.[28] Health service support at the operational and tactical levels performs the task of medical logistics.[29] Execution of these tasks requires planning, continuous assessments, and synchronization. Right now, a gap in executing these tasks is linking cash directly to logistics, personnel services, and health service support requirements during every stage. In contrast, the operations continuum incorporates personnel services by factoring in personnel tracking and reporting, which counts those under medical care, to create running estimates.[30] In that regard, Field Manual (FM) 4-0, *Sustainment Operations*, states,

> commanders rely on LOGSTAT [logistics status] and PERSTAT [personnel status] reports to identify support requirements and capabilities to enable large-scale combat operations. Sustainment staffs use data from sustainment estimation tools, higher headquarters orders, and documents such as country studies to develop running estimates. A running estimate is the continuous assessment of facts, assumptions, constraints, and limitations concerning the current situation and OE [operational environment] used to determine if the current operation is proceeding according to the commander's intent and if planned future operations are supportable. Using sustainment information systems, commodity managers include information in running estimates such as quantity on-hand, quantity consumed, expected quantity on-hand, and expected consumption to anticipate requirements and assist in synchronization. Each staff element and command post functional cell maintains a running estimate focused on how its specific areas of expertise are postured to support future operations.[31]

In this respect, the LOGSTAT and PERSTAT reports are cornerstones of sustainment support. The LOGSTAT and PERSTAT reports firmly fit into the science of planning and assessing by offering the ability to measure and analyze.[32] FM 4-0 provides examples with minimum requirements in appendix E of a LOGSTAT and a PERSTAT.[33] Notably, the minimum components of a LOGSTAT report are organized by classes of supply. FM 4-0 indicates the role of financial management when detailing sustainment considerations for imperatives and introduces the status of funds report as a requirement for assessments.[34] However, FM 4-0 does not include the idea of utilizing a financial status (FINSTAT) report alongside the PERSTAT and LOGSTAT as a part of planning and assessing.[35]

Not regularly assessing financial resources to stave off culmination is problematic when planning for a supply of physical cash at the point of need. An analysis of the days of supply for cash is necessary to support acquisition requirements. Cash cannot transport, protect, or disburse itself. Consider that a pound is 454 grams, a pallet/skid of currency can transport 640,000 bills, and each bill, regardless of denomination, weighs approximately one gram.[36] Therefore, a 640,000-bill skid of currency weighs 1,409.7 lb. and can transport a maximum of $64 million when entirely $100 bills. It is impractical to move coins because of their limited value and weight. A quarter weighs almost six grams, and a dollar coin weighs over eight grams.[37] Past techniques to reduce transporting cash and coins are the soon-to-be terminated EagleCash Card and Army & Air Force Exchange (AAFES) cardboard pog coins.[38] Overall, moving currency from a secure location is the easy part. The more challenging part is moving the currency and safeguarding cash in a contested area of operations. A bulk amount of currency is literally a high-value target.

A personal analogy can apply to this issue. Pick a day, any day you went to a store. You have your wallet and your phone. You decided enough money is in your bank account for your selected goods. When ready to make your purchase, the store can accept only cash. You do not carry cash in your wallet, and an automated teller machine is not readily accessible. Subsequently, you did not complete your purchase. Apply the same situation to units in an area of operations that do not

One $100 bill weighs approximately one gram (0.0022 lb.). A pallet of 640,000 bills ($64 million) weighs about 1,410 lb. (Photo courtesy of the U.S. Treasury Department)

have a supply of cash or are otherwise not readily capable of employing cash when needed. These units cannot sustain operations or continue their mission due to a lack of means.

Part Two: Formulating Application

Classes of supply. Despite the prospect of units being short of cash, there is no supply planning category for cash. Joint Publication 4-09, *Distribution Operations*, defines classes of supply as "the ten categories into which supplies are grouped to facilitate supply management and planning."[39] Table 2 (table 4-1 in Department of the Army Pamphlet 710-2-2, *Supply Support Activity Supply System: Secondary Item and Retail Level Procedures*) describes the ten classes of supply.[40]

Details on each subclass are in table 1-1 of Army Techniques Publication (ATP) 4-42.2, *Supply Support Activity Operations*, and figure G-4 of ATP 5-0.2-1, *Staff Reference Guide Volume I*.[41] The Army deeply embeds supply classes into the science of planning. Cash is absent in the ten groupings within the classes of supply, yet it is undeniably interrelated with logistics tasks as a medium of exchange for the materiel of every category. ATP 5-0.2.1 contends that "early estimation of critical classes of supply required to sustain operations is necessary for any planning effort. Maintenance of the running estimate for the sustainment section covers estimated consumption of all classes of supplies."[42] The availability of funding or cash is integral to the availability of supplies and sustainment at decisive points in an area of operations. Therefore, cash is worthy of designation as a commodity in the classes of supply to foster feasible plans that enable freedom of action, extend operational reach, prolong endurance, and reduce risks.

The commodity of cash. There is a long history of using coins and cash as a medium to exchange for goods and services that dates back to at least the first millennium.[43] Using coins and cash played a prominent role in almost every military conflict. At one point, the U.S. Army even heralded money as a weapons system.[44] However, from a firmer definitional perspective, money is "a commodity accepted by the general

Table 2. Classes of Supply

Classes	References
Class I – Perishable and semi-perishable items. Rations that are packaged as individual or group meals, and gratuitous health and welfare items.	AR 30–22; ATP 4–41, and ATP 4–42
Class II – Clothing, individual equipment, tentage, tool sets and tool kits, hand tools, administrative, and housekeeping supplies, and equipment. This includes items of equipment, other than major items, prescribed in authorization/allowance tables and items of supply (not including repair parts).	AR–700–84, CTA 50–900, CTA 50–970
Class III – Petroleum, oils, and lubricants, petroleum and solid fuels, including bulk and packaged fuels, lubricating oils and lubricants, petroleum specialty products; solid fuels, coal, and related products.	AR 703–2, ATP 4–43
Class IV – Construction and Barrier Material. The Class IV supply category includes fortification materiel, obstacle and barrier material, and construction material for base development and general engineering.	DoDD 5101.12E DoD Executive Agent for Class IV, Construction and Barrier Materiel
Class V – Ammunition, of all types (including chemical, radiological, and special weapons) bombs, explosives, mines, fuses, detonators, pyrotechnics, missiles, rockets, propellants, and other associated items.	AR 190–11, AR 700–20, AR 700–8, AR 5–3, 4–1, AND ATP 4–42
Class VI – Personal demand items packaged as health and comfort packs.	AR 710–4, Army Techniques Publication (ATP) 4–41, and ATP 4–42
Class VII – Major items: A final combination of end products which is ready for its intended use (principal item) (for example, launchers, tanks, mobile machine shops, vehicles).	AR 710–1, supply bulletin (SB) 700–20 appropriate authorization documents
Class VIII – Medical materiel, including medical peculiar repair parts.	AR 10–61, CTA 8–100
Class IX – Repair parts and components, including kits, assemblies, and subassemblies, repairable and non-repairable, required for maintenance support of all equipment.	AR 710–1, DA Pam 708–2, DA Pam 710–2–2, appropriate TMs
Class X – Materiel to support nonmilitary programs, such as agricultural, and economic development, not included in Classes 1 through 9.	CTA 50–909

(Table from DA PAM 710-2-2, *Supply Support Activity Supply System: Secondary Item and Retail Level Procedures*)

consent as a medium of economic exchange. It is the medium in which prices and values are expressed. … It circulates from person to person and country to country, thus facilitating trade, and it is the principal measure of wealth."[45] Underlying considerations about the definition and addition of cash as a class of supply are academic characterizations of commodity, representative, fiat, managed, and token money.[46] The commodity, gold standard no longer applies to the full faith and credit of U.S. currency.[47] The U.S. currently uses a floating currency value influenced by three levels in the monetary system: "(1) the holders of money (the 'public'), (2) commercial banks, and (3) central banks."[48] The three levels do not directly apply to the U.S. military services; therefore, to use the same conceptual underpinnings, an attempt to relate those levels to military operations is necessary. The holders of the money within these levels are military headquarters, operating agencies, units, and end users. Military financial managers facilitate the functions of commercial banks and leverage commercial banks for various purposes. Congress, the U.S. Treasury, and the Federal Reserve System split the role of the central bank.

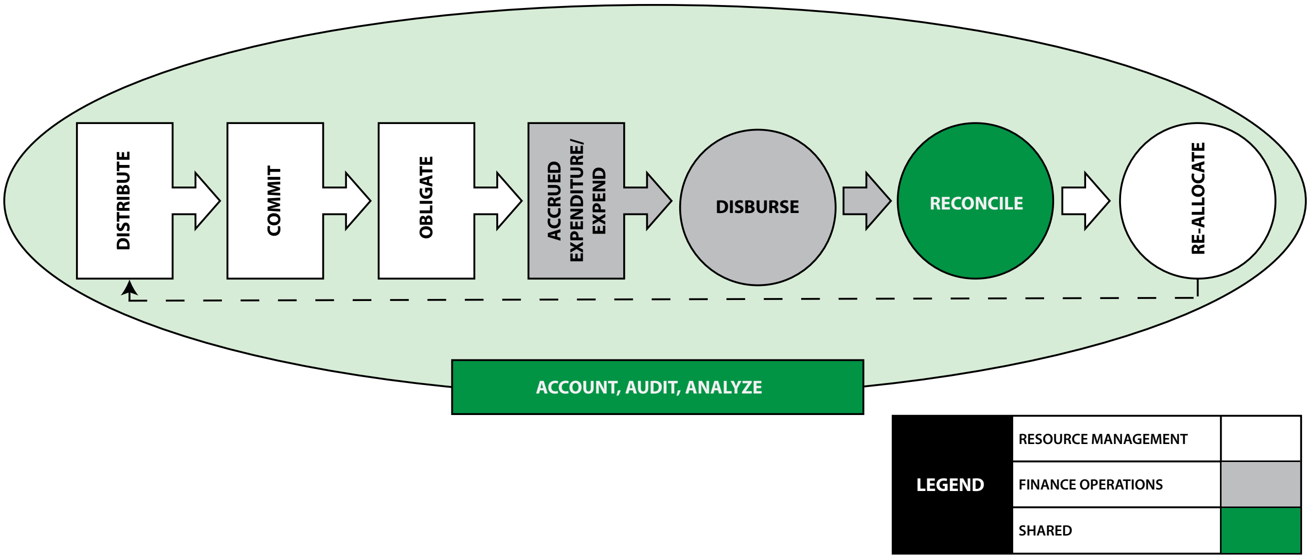
The central bank component pulls the evolution of monetary aggregates, monetary base, and money supply into the conversation. The U.S. Federal Reserve Bank views the money supply in simplest terms as "the total amount of money—cash, coins, and balances in bank accounts—in circulation."[49] Even within the basic description, the money supply is categorized into parts that comprise the aggregate amount of money in circulation. The International Monetary Fund reasons that when "constructing broad-money aggregates, it is necessary to evaluate the degree of *moneyness* of a wide array of financial assets, focusing on the extent to which each type of financial asset provides *liquidity* and a store of value. Liquidity refers to the extent to which financial assets can be sold at, or close to, full market value on short notice."[50] To allow that assessment and to inform monetary policy, the Federal Reserve Bank uses "several standard measures of the money supply, including the monetary base, M1, and M2."[51] The U.S. approach to money supply carries the most weight given its long-held status as the world's reserve currency, with ~60 percent of reserves composed of U.S. dollars.[52] The status elevates these standard measures used as a distinct gauge of the availability of money supply. To elaborate further, the Federal Reserve views the standard measures in the following ways:

> **The monetary base:** The sum of currency in circulation and reserve balances, or deposits held by banks and other depository institutions in their accounts at the Federal Reserve.
> **M1:** The sum of currency held by the public and transaction deposits (inclusive of currency held by the public and transaction deposits—a category that includes balances held in checking accounts and other very liquid deposits) at depository institutions (which are financial institutions that obtain their funds mainly through deposits from the public, such as commercial banks, savings and loan associations, savings banks, and credit unions) and branches of foreign banks operating in the United States.
> **M2:** M1 plus small-denomination time deposits (those issued in amounts of less than $100,000) and retail money market mutual fund shares.[53]

The descriptions of the measures make it clear that the United States uses a well-established approach to money supply data, analysis, and planning. The driving aspect of options determined through these money supply activities revolves around the measure of liquidity or the immediacy of available resources to spend. The measures demonstrate a methodology that starts with a narrow portion of the monetary aggregate that is easy to access and progressively becomes broader with decreased or diminished accessibility. The monetary base consists of readily available cash, while M1 and M2 funds require more time to access. The measures described do not represent the entire monetary aggregate; additional broader categories could increase the inclusiveness of all financial assets. The United States currently uses the stated measures; however, in the past, the United States had monetary aggregate measures from M0 (monetary base) to M7.[54] The U.S. government used these categories in the past to determine the amount of U.S. assets abroad in the operational environments of the two world wars, the Cold War, Persian Gulf War, and Global War on Terrorism. The evolution to the current three measures is a model that informs multiple levers to either ease or restrict the availability of money for end users.

The supply chain of cash (PPBE). A review of the aspects of the Army sustainment WfF, classes of supply, and the commodity of cash provides nearly enough background to develop a framework for cash as the eleventh (XI) class of supply. The remaining area to expand on is the PPBE process. The process is the military supply chain for cash. The planning, programming, and budgeting phases must occur before the congressional enactment of a funding bill that resources the Army. After the enactment, financial managers perform the execution phase—the "E" in PPBE.[55] While most of the time, budget execution uses an EFT, there are times when cash payments are required and provide flexibility. AR 1-1 and FM 4-80, *Financial Management Operations*, explain the mechanics of executing funding. AR 1-1 specifically states that the funding execution process involves the following:

a. Apportioning, allocating, and allotting funds.
b. Obligating and disbursing the funds.
c. Reporting and reviewing the effectiveness of executing them
d. Performing in-progress evaluations and making course corrections to reallocate resources to meet changing requirements that develop during execution.
e. Reprogramming funds to finance unbudgeted requirements that result from changed conditions unforeseen when submitting the budget and having higher priority than the requirements from which funds are diverted.[56]



(Figure by author; based on figure 4.3, "Stages of Transaction," FM 4-80, *Financial Management Operations*)

Figure. Proposed Funding Execution Life Cycle

The excerpt above outlines the activities to perform funding execution. Another basic description of funding execution is the stages of a transaction found in FM 4-80, which views the stages as authorization, commitment, obligation, accrued expenditure/expense, and disbursement.[57] To provide shared understanding, a commitment is an "administrative reservation of funds where the funds certifying official certifies that funds are available for an approved requirement."[58] Obligations are the next stage in the process and are a legal reservation of funds that binds the government to make a payment.[59] "Several actions may lead to the incurrence of a legal obligation (for example, the acceptance of a DD Form 448 [Military Interdepartmental Purchase Request] or the issuance of a travel order)."[60] A financial manager must know the accurate status of funds available after obligations are disbursed by EFT or in cash to determine how much funding is available for additional requirements.

An alternate way of referring to funding execution stages not found elsewhere is the funding execution life cycle (see the figure). The choice of terminology stems from AR 1-1 viewing appropriations as a life cycle.[61] The funding execution life cycle melds the two similar accounts of funding execution into one model by laying out the stages as distribute, commit, obligate, expend, disburse, reconcile, and reallocate. Financial managers execute these life cycle stages when they account for, audit, and analyze funding by decoding the line of accounting. The graphical depiction of the funding execution life cycle shows that reconciling partial and final disbursed payments to the obligation amount allows financial managers to attempt to reallocate funding to pay for more goods and services. Distribution starts the funding execution life cycle, which involves the funds control process to ensure the four ceiling amounts for (1) appropriations, (2) apportionments, (3) allocations, and (4) allotments. These ceilings set the amounts available to commit and obligate at any given time based on the fund balance with the U.S. Treasury.[62] Financial managers later determine if commitments or obligations resulted in a disbursed payment and if any remaining funding is available to reallocate after relieving an obligation.[63]

The reconciliation stage directly connects to reviewing effectiveness and performing in-progress evaluations of budget execution to maximize the utilization of available funding. The frequency of reconciliation is continuous; however, it certainly is required in certain instances. In general, "when remaining or excess fund balances exist that cannot be explained, reconciliation may be required to compare all source documents with the entitlement and accounting systems."[64] Other conditions necessitating reconciliation are (1) incomplete contract, payment, or accounting information; (2)

Table 3. Proposed Additional Class of Supply

Class XI - Cash Supply: Forms of cash that resource all other classes of supply using the process to apply appropriated funds to the authorized program or purpose.	**References:** DoD Financial Management Regulation; AR 1-1
Class XI Subclasses	
Subclass A (M0) - Cash	
A1- U.S. Currency	**A5-** Currency with Sub-Agents
A2- Military Payment Certificates (Operational Currency)	**A6-** Digital Currency
A3- Foreign Currency 1	**A7-*AN*-** Additional Foreign Currencies
A4- In-Transit Currency	
Subclass B (M1) - Cash Instruments	
B1- Limited Depositary Accounts	**B6-** Government Purchase Cards
B2- U.S. Treasury Checks	**B7-** Government Travel Credit Cards
B3- U.S. Negotiable Instruments	**B8-** Pending Collections (Receipts, Reimbursements, & Refunds)
B4- Foreign Negotiable Instruments	**B9-** Non-Appropriated Fund Instrumentalities
B5- U.S. Debit Cards	
Subclass C (M2) - Budgetary Allotments	
C1- Undistributed	**C5-** Expenditure
C2- Distributed	**C6-** Undisbursed Obligation
C3- Commitment	**C7-** Disbursed
C4- Obligation	
Subclass D (M3) - Funded Program Allocations*	
D1- Undistributed	**D4-** Expired
D2- Distributed	**D5-** Canceled (Closed)
D3- Pending Reprogramming	**D6-** Pending Rescission
**Time period available for a funded program varies by appropriation type.*	

(Table by author)

insufficient funds; (3) un-recouped progress payment balances at or near contract completion; (4) possible overpayments; (5) unmatched disbursements; and (6) negative unliquidated obligations.[65] There are numerous examples of both financial management competencies reconciling regularly. Reconciliation prepares for the end of a funding period of availability, such as the end of a fiscal year, and ensures the fund balance with the U.S. Treasury remains accurate.

Establishing cash as a class of supply. Background on the sustainment WfF, an overview of classes of supply, defining aspects of money supply, and descriptions of the mechanics of budget execution provide a basis to detail a framework for cash as an eleventh (XI) class of supply. Table 3 shows the proposed addition to the classes of supply.

This proposal aims to stimulate discussion, initiate refinement, and present a concept for integrating cash as a class of supply. Establishing a compatible framework enhances sustainment synchronization and improves the common operating picture by explicitly linking funding as a precursor to supply procurement reflected in the LOGSTAT. The cash planning framework features the foundational pillars of easing and restricting access to cash, debits (decreases), credits (increases), and a supply chain model. The addition starts by defining Class XI-Cash Supply as the forms of cash that resource all other classes of supply using the process to apply appropriated funds to the authorized program or purpose. References identified are the *DOD Financial Management Regulation* (DoD 7000.14-R) and AR 1-1. Adding Class XI-Cash Supply prompts a need to update Army regulations and doctrine that include sustainment planning, materiel management, resource management, and finance operations. The updates need to nest with higher-level references by adding to, but not taking away from, established parameters. The subclasses start with the most liquid form of cash supply as a part of the monetary aggregate that is immediately available.

Subclass A (M0)-Cash includes **A1**-U.S. Currency, **A2**-Military Payment Certificates (Operational Currency), **A3**-Foreign Currency 1, **A4**-In-Transit Currency, **A5**-Currency with Sub-Agents, **A6**-Digital Currency, and **A7 to AN**-Additional Foreign Currencies.[66] Disbursing accountability forms mostly guide the selection of these cash categories. The pertinent disbursing forms are the Department of Defense (DD) Form 1081 (Statement of Agent Officer's Account), DD Form 2665 (Daily Agent Accountability Summary), DD Form 2657 (Daily Statement of Accountability), and Standard Form (SF) 1219 (Statement of Accountability).[67] It is worth noting that the SF 1219 transitioned to the Financial Management Service (FMS) Form 1219/1220 Process and Report, and the U.S. Treasury anticipates eliminating the reporting requirement.[68] Subclass A also includes a placeholder for digital currency to posture for potential future use. The U.S. government started evaluating a Central Bank digital currency at the beginning of 2022.[69]

Subclass B (M1)-Cash Instruments start to account for less liquid forms of the cash supply. The subclass categories are **B1**-Limited Depositary Accounts, **B2**-U.S. Treasury Checks, **B3**-U.S. Negotiable Instruments, **B4**-Foreign Negotiable Instruments, **B5**-U.S. Debit Cards, **B6**-Government Purchase Cards, **B7**-Government Travel Credit Cards, **B8**-Pending Collections (Receipts, Reimbursements & Refunds), and **B9**-Non-Appropriated Fund Instrumentalities. The cash instruments again contain components that appear on disbursing forms for the initial four components. The subclass also recognizes units and end users accessing funding with U.S. debit cards, government purchase cards, and government travel credit cards. Pending collections involve increases to cash in **Subclass A** from receipts, reimbursements, and refunds.[70] The last component of the subclass accounts for the funding from nonappropriated fund instrumentalities.[71]

Subclass C (M2)-Budgetary Allotments and **Subclass D (M3)**-Funded Program Allocations work in conjunction with each other based on appropriations and apportionments to ensure the distribution stage of the funding execution life cycle does not allow spending above and beyond available resources. Available budgetary allotments "authorize users to place orders and award contracts for products and services to carry out approved programs."[72] Placing orders and awarding contracts are vehicles that obligate funding. An expenditure occurs next upon documentation of the delivery of goods or services. As mentioned, financial managers determine the amounts undisbursed or disbursed from the obligations. An aspect of cash supply planning is whether orders or contracts need payment in U.S. or foreign currency. The requirements to make currency payments directly tie to **Subclass A**-Cash. The analysis of commitments and obligations leads to determining upcoming payments that need different types of currency and which locations require currency payments.

Subclass D (M3)-Funded Program Allocations return to the requirement to maintain ceilings during the distribution of funds limited by the appropriations and apportionments. Headquarters, Department of the Army distributes funded program allocations and determines the adjustments to budgeted top-line amounts based on congressional marks, reprogramming actions, or rescissions.[73] Funded programs are subject to time periods from the life cycle of appropriations that determine the deadline to create new obligations. The life cycle imposes restrictions on the Army from the funding when an appropriation is in a closed or canceled status.[74] **Subclass D**, in essence, is the starting point for the cash supply chain and governs the subsequent distribution.

A Class for Cash

In summary, examining a framework for cash as a class of supply identified the numerous facets influencing the amount of means (resources) to make cash payments at the point of need. Inadequate funding accountability in the past encourages establishing cash as a class of supply to achieve auditability. As proposed, the Class XI-Cash Supply prompts dialogue, advances refinement, and initiates an addition to the methodology for sustainment planning synchronization, coordination, and integration. Cash supply is a critical aspect of the sustainment WfF when an EFT is impossible in a denied, degraded, intermittent, or limited environment. Cash supply planning ultimately empowers the tasks and systems of the sustainment WfF to enable freedom of action, extend operational reach, and prolong endurance. The Lykke model identifies that an imbalance between ends (objectives), ways (concepts or options), and means (resources) introduces a risk to mission or forces. The inclusion of cash as a class of supply mitigates risks from imbalances to support the mission and forces by better forecasting the decisive points that require means (resources). ■

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