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NAVAL POSTGRADUATE SCHOOL Monterey, California



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THESIS

A COMPARISON OF THE FINANCIAL MANAGEMENT
CURRICULUM AT THE NAVAL POSTGRADUATE
SCHOOL AND OTHER GRADUATE PUBLIC FINANCIAL
MANAGEMENT CURRICULA IN THE UNITED STATES

by

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June 1992

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A Comparison of the Financial Management Curriculum
at the Naval Postgraduate School and other Graduate
Public Financial Management Curricula in the United States

by

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Submitted in partial fulfillment
of the requirements for the degree of

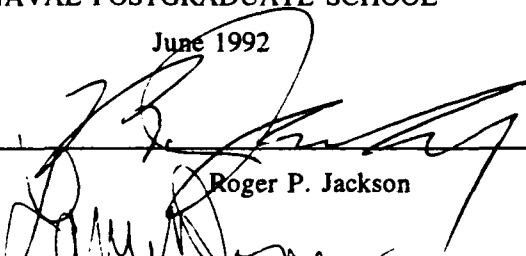
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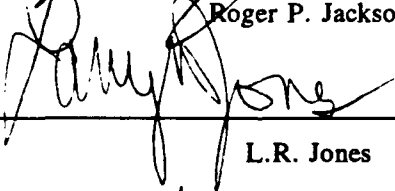
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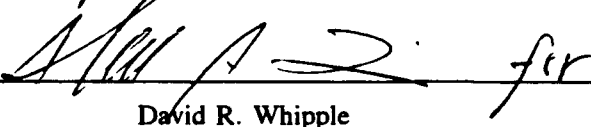
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ABSTRACT

This thesis provides a comparative analysis of the financial management curriculum at the Naval Postgraduate School (NPS) and other graduate public financial management curricula offered in graduate college and university programs throughout the United States. MBA curriculum data were solicited from business schools, MPA curriculum data were obtained from policy schools and DoD components were polled for service-sponsored graduate education data.

Curricular data are compared and evaluated. The thesis concludes that the financial management curriculum at NPS is a special program that includes the best of both MBA and MPA curricula. The NPS curriculum coverage is uniquely adapted to provide public sector graduate financial management education. No other program offered in the U.S. is better designed to meet the financial management education needs of the Navy and Department of Defense. It meets the requirements of the sponsor, and is a course of study that the Navy can depend on to produce financial managers to handle present and future fiscal challenges.

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I. INTRODUCTION

A. BACKGROUND

The stated objective of the Financial Management (FM) curriculum at the Naval Postgraduate School (NPS) is:

" . . . to prepare officers for business and financial positions in the Navy. Financial Managers assist the Navy's decision-making processes at all levels by providing accurate, timely and relevant information. They are concerned with the optimal allocation of human, physical and financial resources to achieve the Navy's goals & objectives while assuring efficient and effective expenditure of public funds. [NPS, 1992]

The FM curriculum is a six quarter course of study culminating in a Master of Science in Management degree. Director, Fiscal Management Division, (OP-82), is the program sponsor for the Financial Management Subspecialty, (Code xx31). Following are the Military Education Requirements (MER's) for Code xx31, [NPS, 1992]:

- A comprehensive understanding of all aspects of the Department of the Navy (DON) budget cycle, including planning, programming and budget formulation and execution.
- The ability to identify, analyze and prepare effective and economic program alternatives. An ability to prepare and evaluate cost estimates.
- The ability to manage and control funds, including appropriated, revolving and non-appropriated funds, to support approved programs.
- The ability to develop and review financial reports and analyze budget execution against operating and financial plans, and to develop alternative plans based on

analyses of an activity's financial performance. An ability to recommend or make management decisions regarding the reallocation or reprogramming of funds.

- A comprehensive knowledge of the principles of finance and business management, in both the public and private sectors, to support participation and leadership in the development, implementation and administration of fiscal policies, procedures, systems and controls to ensure the responsible use of available resources.
- The ability to develop and use internal control and audit techniques to establish sound management controls and to evaluate financial reports and operating performance.
- The ability to determine the unit costs of outputs and to use such costs in the analysis of performance and the allocation of resources.
- An understanding of the acquisition process as it relates to procurement and development appropriations.
- An understanding of joint and maritime strategic planning.
- The ability to recognize issues of potential importance to the Navy, formulate a research program, perform the necessary research and report the results. [NPS, 1992]

The world in which our Navy operates is changing. The threat of the Soviet Union is gone and our military is shrinking to meet the perceived reduced threat in the 1990's and beyond. One way the military is shrinking is through the Defense Management Report (DMR) process. Promulgated in 1989 by the Department of Defense (DoD), the DMR process is an attempt to manage the Department of Defense more economically and efficiently. One example of a DMR action is the consolidation of the Army, Navy, Air Force and Marine Corps military payroll systems into the Defense Finance & Accounting Service (DFAS). The idea is; "Why have four

independent systems doing approximately the same thing, when one DoD wide system can do the same job?" DMR 985 concerns the quality and relevance of Financial Management Education in the DoD. The Army, Navy/Marine Corps and Air Force each have their own graduate FM education program. The purpose of this thesis is to compare the Navy/Marine Corps Financial Management curriculum at the Naval Postgraduate School with the Army and the Air Force curricula, and also with other curricula offered at civilian institutions in the United States.

B. THE MBA, MS AND MPA DEGREES

There is considerable confusion over the nature and purpose of a Masters degree. Some consider the M.A. to be a terminal job oriented degree, while others consider it as a necessary stepping stone to the PhD. After World War II, graduate education expanded rapidly in both numbers of students and types of degrees. Today there are more than 390 different Master's degree programs offered at thousands of colleges and universities in the U.S. Of interest to the Navy's Financial Management community are the Master of Business Administration (MBA) degree, the Master of Science in Management (MS) degree, the Master of Public Affairs and Administration (MPA) degree and other programs that provide financial management education.

An MBA program is designed to prepare students for careers in professional business management. Curricula meet

the needs of general management candidates, and those with more specialized interests in accounting, finance, human resources, management, international business, management information systems, marketing, operations and logistics management, organizational behavior, real estate, and insurance and risk. MBA programs are an excellent training ground for private industry managers. However, most MBA programs provide little to no emphasis on Public Financial Management.

The MS in Management curriculum at the Naval Postgraduate School is an interdisciplinary degree program designed to meet the Navy's Military Education Requirements. The curriculum combines Accounting, Economics, Analytical Methods, Management, Public Policy, Information Systems and other courses.

An MPA program is designed to prepare students for careers in local, state or federal government, in non-profit agencies or in the private sector where knowledge of government is important. Curricula vary widely but most include required core courses and area of concentration courses. The primary focus of an MPA degree is:

- The management of public organizations, including; human resources, budgeting and financial processes.
- The application of qualitative and quantitative analysis in; policy planning, programming, implementation and evaluation.
- The understanding of the public policy and organizational environment, including; political, legal

and ethical processes, organization and management concepts and behavior, and economic and social processes. [NASPAA, 1990]

It is this focus and flexibility that should make an MPA the degree of choice for the financial management corps of the Navy. This thesis will compare the NPS Financial Management curriculum with MPA Financial Management curricula.

C. RESEARCH QUESTIONS

The research questions addressed in this thesis are as follows:

- 1) What are the appropriate Public Financial Management curricula for comparison with the NPS Financial Management curriculum?
- 2) What criteria should be used for comparison?
- 3) How does the NPS Financial Management curriculum compare to:
 - a) Financial Management curricula offered by other DoD activities?
 - b) Other Financial Management curricula to which the Navy sends students?
 - c) Financial Management curricula at selected graduate schools in the United States?
 - d) Business School MBA curricula at selected schools in the United States.

D. COMPARISON SCHOOL SELECTION AND CRITERIA FOR COMPARISON

The National Association of Schools of Public Affairs and Administration (NASPAA) is a specialized accrediting body that accredits Master's degrees programs in public

affairs and administration. Their 1990 Directory of member institutions provides information on 223 degree-granting institutions, of which 214 offer Master's degrees. [NASPAA, 1990]. A review of the directory indicated that 91 schools offer MPA programs with a Public Finance/Budget concentration. Those schools are included in the Appendix and are the major element of comparison in this thesis.

A small sample of business school MBA programs were also selected for comparison. Three prestigious schools, Indiana University, University of Pennsylvania-Wharton School, and Stanford University were selected, and the remaining MBA curriculum data was gleaned from the catalogs of schools that also offer MPA's. With the schools selected, the following criteria for comparison are employed:

- 1) Type of degree offered and accreditation.
- 2) Breadth and depth of the Management/Administration curricula; including Accounting, Economics, Management, Quantitative Analysis, Public Policy, Computer Applications and Other curriculum options.
- 3) Program length, units required for graduation, thesis requirement.
- 4) Specific financial management program course content coverage.
- 5) Navy/DoD program content and emphasis in curriculum.
- 6) Comparison of the NPS FM curriculum to (a) MPA and (b) MBA programs according to course content and breadth and by local vs. state vs. federal government emphasis.

II. COMPARISON AND ANALYSIS OF GENERAL MANAGEMENT AND ADMINISTRATIVE COURSE OFFERINGS

A. METHODOLOGY

Data collection for this thesis consisted of archival research of microform college catalogs, and telephone surveys of the schools. A total of 92 schools were contacted directly and curriculum material was received from 94% of the group. Most schools were very helpful with the survey research. Material was collected from three DoD sponsored programs, 78 MPA programs and six MBA programs. Upon receipt of the material, it was analyzed employing the criteria indicated in the previous chapter. Of the 78 MPA packages received, 38% have no Public Financial Management emphasis at all, or are provided primarily as training for local government management/administration.

B. CRITERION #1 - TYPE OF DEGREE OFFERED AND ACCREDITATION

The survey purposefully chose schools offering MPA and MBA degrees. In addition to the MS in Management degree from NPS, an MS in Cost Analysis degree from the Air Force Institute of Technology (AFIT) was investigated. All of the curricula are accredited by NASPAA and one or more of many regional academic accrediting associations, (Middle States Association of Colleges and Secondary Schools, Southern Association of Colleges and Schools, The Accrediting

Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges, North Central Association of Colleges and Schools, . . .).

C. CRITERION #2 - BREADTH AND DEPTH OF THE MANAGEMENT & ADMINISTRATIVE CURRICULA

The public financial management curricula were divided into seven modules for analysis and comparison. These modules are; Accounting, Economics, Management, Analytical, Public Policy, Computer and Other. Each module contains general subheadings representing individual course offerings. (e.g. Accounting contains; financial accounting, managerial accounting, cost accounting, auditing and other). All of these modules are offered in the NPS program. Tables 1-5 provide comparison matrices of the schools reviewed. There are no Personnel Administration, Legal Principles, Ethics in Government or Public Administration courses in the NPS curriculum. These courses, however, are found in more than 75% of the curricula examined and consequently are included in the matrices for comparison.

TABLE 1. CURRICULA MATRIX

	USN-NPS	USA-SYRACUSE	USAF-AFIT	AKRON	AZ STATE	ARIZONA	BALTIMORE	CA LONG BEACH	CA LOS ANGELES	CA FULLERTON	CANISIUS COLL
Accounting:	X										
Financial	X	X	X		X	X	X				
Managerial	X	X	X			X					
Cost	X										
Auditing											
Other			X	2				X			2
Economics:											
Macroeconomics	X	X	X		X		X			X	X
Microeconomics	X		X			X					X
Cost/Benefit Analysis	X	X				X				X	
Other				X			X				
Management:											
Communications	X		2			X		X			
Organization & Mgt	X	3		X	X	2	X	2	X	2	X
Mgt Control Systems	X										X
Strategic Mgt/Policy	X	X									
Systems Acquisition	X										
DoD Financial Mgt	X	X	X								
Public/Non-profit FM					X	2	X	X	X	X	X
Personnel/HRM				X	X	X	X		X	X	X
Analytical:											
Math for Mgt	X	X	X								
Statistics for Mgt	X	X	2			X	X				
Operations Research	X	X	X								
Quantitative Methods			7	X	2	X	X	2	X	X	X
Public Policy:											
Policy Processes	X			X	X	X	X			X	X
Policy Analysis	X						X	X	X	X	
Public Budget/Finance				X	X	X	2	X	X	X	
Expenditure Analysis	X										
Other					2		X				2
Computer:											
Skills Development/Appl	X										
Mgt Information Syst	X	X	X	X	X		X	X	X		X
Other		X	X			X					
Other:											
Legal Aspects				X			X		X		
Ethics in Government		X		X			X				
Public Administration				X				X	2	X	
Admin Theory/Policy		X		X				X	2	X	
Degree Offered: 1)MPA	2	3	2	1	1	1	1	1	1	1	1
2)MS 3)MBA											

TABLE 2. CURRICULA MATRIX

	CLARK ATLANTA	COLORADO	CONNECTICUT	DUKE	FL ATLANTIC	FL INT'L	GEO WASHINGTON	GEORGIA STATE	IDAHO STATE	INDIANA	JOHN JAY
Accounting:											
Financial	X		X							X	
Managerial	X									X	
Cost										X	
Auditing					X					X	X
Other		X	2		X			X			X
Economics:											
Macroeconomics	X	X		X		X		X	X	X	X
Microeconomics		X		X				X		X	X
Cost/Benefit Analysis				X							
Other			X			X				X	
Management: (other)							2			6	
Communications				X						X	
Organization & Mgt	X	X	2	X	X	X	X	X	X	X	X
Mgt Control Systems											
Strategic Mgt/Policy		X				X	X			X	
Systems Acquisition					X						
DoD Financial Mgt											
Public/Non-profit FM	X	X	X		X	X	X	X	2		2
Personnel/HRM	X	X	X	X	X	2			X		X
Analytical:											
Math for Mgt											
Statistics for Mgt	X	X	X	X	X	X	X	X			
Operations Research											
Quantitative Methods	X	X	X	X	X	2	X			2	2
Public Policy:											
Policy Processes	X	X	X	X	X				X		
Policy Analysis		X		X		X	X	X	X		X
Public Budget/Finance	X	X	X	X	2	X	X	X	X		
Expenditure Analysis							X				
Other	X		X	X	X			X		X	
Computer:											
Skills Development/Appl		X	X								2
Mgt Information Syst						X				X	
Other											
Other:											
Legal Aspects		X	X		X		X		X	X	
Ethics in Government		X	X	X			X				
Public Administration	X	X				X	X	X	X		X
Admin Theory/Policy					X		X	X			
Degree Offered: 1)MPA	1	1	1	1	1	1	1	1	1	3	1
2)MS 3)MBA											

TABLE 3. CURRICULA MATRIX

	KANSAS STATE	KENT STATE	KENTUCKY	LEWIS+CLARK	LONG ISLAND U	LA ST U	MARYLAND	MISSOURI	NEW MEXICO	NEW YORK U	NC STATE
Accounting:											
Financial									X		X
Managerial		2					X				X
Cost				X						X	
Auditing				X					X		
Other	X	X	2	X		X	2	X			X
Economics:											
Macroeconomics			X	X	X	X			X	X	
Microeconomics						X	X			X	
Cost/Benefit Analysis		X								X	
Other			X	X	X	X					X
Management:											
Communications											
Organization & Mgt	X	2	X	X	X				X	X	2
Mgt Control Systems				X			X				
Strategic Mgt/Policy				X				X			
Systems Acquisition											
DoD Financial Mgt											
Public/Non-profit FM	X	X	X	X	X	X	2	2	2	2	2
Personnel/HRM	X	X		X	X	X		X	X	X	
Analytical:											
Math for Mgt											
Statistics for Mgt		X	X	X		X	X			2	
Operations Research			X	X		X				X	
Quantitative Methods	X			X	X		X	X	X		X
Public Policy:											
Policy Processes			X	X	X	X	X	X		X	X
Policy Analysis	X	X	X	X		X	X	X	X	X	X
Public Budget/Finance	2	3	X	X	2	X	X	X	X	2	X
Expenditure Analysis		X									
Other	X			X		X					
Computer:											
Skills Development/App1				X	X	X					X
Mgt Information Syst		X			X				X	X	
Other											
Other:											
Legal Aspects	X			X	X						
Ethics in Government	X			X							X
Public Administration	X	X		X	X	X		X	X		X
Admin Theory/Policy		X			X			X			X
Degree Offered: 1)MPA	1	1	1	1	1	1	1	1	1	1	1
2)MS 3)MBA											

TABLE 4. CURRICULA MATRIX

	N ILLINOIS	OHIO STATE	O DOMINION	PENN STATE	PITTSBURG	SAN DIEGO ST	SHIPPENSBURG	S FLORIDA	S MAINE	SOUTHERN CA	SUNY ALBANY
Accounting:											
Financial		X	X		X			X	X		
Managerial	X							X			
Cost											
Auditing											
Other	2	X	X		X			X	X	X	2
Economics:											
Macroeconomics	X	X	X		X	X		X	X		X
Microeconomics			X		X	X					
Cost/Benefit Analysis		X									
Other						X			X		
Management:											
Communications											
Organization & Mgt	X	X	X	2	X				X	2	
Mgt Control Systems											
Strategic Mgt/Policy		X		X	X						
Systems Acquisition											
DoD Financial Mgt											
Public/Non-profit FM	X	X	X	X	X	X	X	X	X	2	X
Personnel/HRM	X	X	X	X	X	X	X	X	X		X
Analytical:											
Math for Mgt											
Statistics for Mgt		X	X		X	X			X		
Operations Research											
Quantitative Methods	2	X	X	2	X	X	X	2	X	X	X
Public Policy:											
Policy Processes		X	X	X	X	X	X		X		
Policy Analysis	X	X	X	X	X	X	X	X		X	X
Public Budget/Finance	X	X	X	X	X	X	X	2	2	2	X
Expenditure Analysis		X	X								
Other		X					X				2
Computer:											
Skills Development/Appl					X				X		X
Mgt Information Syst		X		X							
Other		X									
Other:											
Legal Aspects		X	X	X	X				X		X
Ethics in Government				X	X						
Public Administration	X	X	X	X	X	X	X	X		X	X
Admin Theory/Policy											
Degree Offered: 1)MPA	1	1	1	1	1	1	1	1	1	1	1
2)MS 3)MBA											

TABLE 5. CURRICULA MATRIX

	SYRACUSE	TN STATE	TEXAS - SA	VA COMMONWEALTH	WAYNE STATE	WICHITA ST	KENT STATE	MICHIGAN ST	OHIO STATE	PENN - WHARTON	STANFORD
Accounting:											
Financial						X	X	X	X	X	X
Managerial						X	X	X	X		X
Cost								X			
Auditing		X						X			
Other			2			X				X	
Economics:											
Macroeconomics				X	X		X	X		X	X
Microeconomics	X				X	X	X	X	X	X	X
Cost/Benefit Analysis	X						X				
Other							2			X	X
Management: (Other)							7	4	7	7	7
Communications			X					2	X		
Organization & Mgt	X	X		X	X		X	X		X	X
Mgt Control Systems											X
Strategic Mgt/Policy	X							X	3	X	
Systems Acquisition											
DoD Financial Mgt											
Public/Non-profit FM	X	2	2	2	X	2					X
Personnel/HRM	X	X	X	X	X	X					
Analytical:											
Math for Mgt										X	
Statistics for Mgt	X	X		X	X	2	X		X	X	X
Operations Research				X							
Quantitative Methods	X	X	X		X	X	X	X	X	X	X
Public Policy:											
Policy Processes	X		2	X	X						
Policy Analysis	X	X	X								
Public Budget/Finance	X	X	X	X	X	2					
Expenditure Analysis					X						
Other	2	X				X					
Computer:											
Skills Development/Appl	X	X				X				X	X
Mgt Information Syst							2	X	X		X
Other											
Other:											
Legal Aspects		X		X				X	X		
Ethics in Government	X										
Public Administration	X	X	X	X	X	2					
Admin Theory/Policy				X		X					
Degree Offered: 1)MPA	1	1	1	1	1	1	3	3	3	3	3
2)MS 3)MBA											

D. EVALUATION OF COMPARATIVE OFFERINGS

The most difficult part of designing Tables 1-5 was classifying and defining individual courses. For instance, is the Microeconomics and Public Policy Making course offered at Duke University comparable to the Microeconomic Theory course offered at NPS? Is the Financial Accounting course offered at Ohio State comparable to the Fundamentals of Accounting course offered at NPS? The dilemma was resolved by examining the individual course descriptions in the catalogs, as illustrated below:

Duke University; **Microeconomics and Public Policy Making.** Consumption and production theory, welfare economics, theories of collective choice, market structures and regulation, and non-market decision making. [Duke University, 1992]

NPS; **Microeconomic Theory.** Determination of the allocation of resources and the distribution of output. Consumer and producer choice theory. Partial equilibrium analysis. Welfare economics. Applications to defense problems are emphasized. [NPS, 1992]

Ohio State; **Financial Accounting.** Introduction to financial accounting theory and techniques for professionals. Emphasis on determination of income in accordance with generally accepted accounting principles. [Ohio State University, 1992]

NPS; **Fundamentals of Accounting.** Study of basic accounting concepts and standards. Specific topics include the accounting cycle, asset valuation, liabilities and capital structure, earnings measurement, cash flow analysis and financial statement analysis. [NPS, 1992]

More than 900 such comparisons were made to establish good fits for course offerings. Some courses, however, had no direct comparison in the NPS curriculum. Examples can be

found at Virginia Commonwealth University and Kent State University:

Virginia Commonwealth; **Personnel Administration in Governmental Organizations.** The general concepts, principals, and techniques of personnel administration and employee relations as applied in governmental units and agencies. [Virginia Commonwealth university, 1992]

Kent State; **Marketing Concepts.** Explains the various marketing principals and concepts with emphasis on the decisions of a marketing manager (product price, distribution, and promotion). [Kent State University, 1992]

E. CRITERION #3 - PROGRAM LENGTH, UNITS REQUIRED FOR GRADUATION AND THESIS REQUIREMENTS

As expected, each curriculum is quite different in both estimated time to completion and requirements. Table 6 compares program length, units required, thesis requirements and internship requirements. Of the 55 school curricula compared, 78% require at least 20 months to complete, while only 22% take fewer than 20 months to complete, indicating that time to degree completion does not differentiate among the curricula significantly. Many of the curricula are designed to be accessible to part-time students, attending courses at night and on weekends. Additionally, 64% of the curricula require an Internship, adding up to three months to the curriculum length. A common phrase found in the curricula material was "Time limit for completion . . . 7 consecutive years," indicating that minimum time to completion is not a major concern for many schools as it is at NPS. Students with significant public administration

work experience are able, in most curricula, to waive the Internship requirement and thus reduce their total time to degree.

The units required for graduation in the curricula average 43 semester hours and 64 quarter hours. The heaviest credit load is at NPS with 81 quarter hours in only 18 months, the lightest credit load is at Syracuse University with 25 semester hours in 12-18 months. Significantly, only 16% of the curricula sampled require a Masters degree thesis, while 45% do not require a thesis, and the remaining 39% have optional thesis requirements in lieu of additional course work. Chapter III further analyzes public financial management curricula and program models to address criteria four through six.

TABLE 6. TIME/UNITS/THESIS/INTERNSHIP MATRIX

School	Time to Completion	Units Required	Thesis Required	Internship Required
USN-NPS	18MO	81Q	Y	N
USA-SYRACUSE	14MO	54Q	O	N
USAF-AFIT	17MO	65Q	Y	N
AKRON	22MO	47S	O	Y
ARIZONA STATE	22MO	42S	O	Y
ARIZONA	24MO	54Q	N	Y
BALTIMORE	22MO	42S	O	Y
CA LONG BEACH	18MO	36S	N	N
CA LOS ANGELES	22MO	64Q	Y	N
CA FULLERTON	22MO	42S	N	Y
CANISIUS	22MO	40S	N	Y
CLARK ATLANTA	22MO	42S	Y	Y
COLORADO	22MO	45S	O	Y
CONNECTICUT	22MO	48S	N	Y
DUKE	22MO	48S	N	Y
FL ATLANTIC	22MO	42S	N	Y
FL INT'L	18MO	39S	N	N
GEO WASHINGTON	22MO	42S	N	Y
GEORGIA STATE	22MO	65Q	N	Y
IDAHO STATE	16MO	36S	O	Y
INDIANA	24MO	53S	N	N
JOHN JAY	22MO	42S	O	Y
KANSAS STATE	22MO	42S	O	Y
KENT STATE	22MO	45S	N	Y
KENTUCKY	22MO	45S	N	Y
LEWIS+CLARK	15-24MO	61Q	N	N
LONG ISLAND U	22MO	48S	O	N
LOUISIANA ST	22MO	42S	N	Y

MARYLAND	22MO	48S	O	N
MISSOURI	22MO	39S	N	N
NEW MEXICO	22MO	42S	Y	N
NEW YORK U	22MO	60Q	Y	N
NC STATE	22MO	40S	N	Y
N ILLINOIS	22MO	45S	Y	Y
OHIO STATE	22MO	72Q	Y	Y
OLD DOMINION	22MO	42S	O	Y
PENN STATE-HA	22MO	45S	O	Y
PITTSBURG	22MO	48S	N	N
SAN DIEGO ST	22MO	48S	O	Y
SHIPPENSBURG	18MO	30S	O	Y
S FLORIDA	24MO	46S	N	Y
S MAINE	22MO	45S	Y	Y
SOUTHERN CAL	22MO	41S	O	Y
SUNY ALBANY	22MO	48S	N	Y
SYRACUSE	12-18MO	25S	N	N
TENNESSEE ST	22MO	42S	O	Y
TEXAS-SAN ANT	22MO	42S	N	Y
VA COMMON....	22MO	45S	N	Y
WAYNE STATE	16MO	39S	O	Y
WICHITA STATE	22MO	48S	N	Y
KENT STATE	22MO	61Q	N	N
MICHIGAN ST	24MO	54S	O	N
OHIO STATE	24MO	98Q	N	N
PENN-WHARTON	22MO	18UNITS	O	N
STANFORD	22MO	108Q	O	N

III. ANALYSIS OF PUBLIC FINANCIAL MANAGEMENT CURRICULA

A. CRITERION #4 - SPECIFIC PUBLIC FINANCIAL MANAGEMENT PROGRAM CONTENT. MODELS OF COMPREHENSIVE PUBLIC FINANCIAL MANAGEMENT PROGRAMS

There are many different graduate level FM curricula and study plans offered in U.S. higher education institutions. Each is designed to emphasize particular strengths. For example, the MPA program at Montana State University has a local/state/regional government emphasis while the MPA program at American University has a state/federal government emphasis. Curricular content also varies considerably. In evaluating public financial management curricula, it is advantageous to use a comprehensive course model for comparison. Models indicate what ought to be taught in the FM curriculum. Table 7 provides such a model, indicating the dimension, subfunction and focus of what should be included in a Public Budgeting curriculum. This model was developed by Alexander and published in 1984 in *Public Budgeting and Finance*, in conjunction with his participation in the "Reforming Curricula in Budgeting and Financial Management: Training Needs for Future Administrators," round table at the American Society for Public Administration's 1984 annual conference.

TABLE 7. PUBLIC BUDGETING CURRICULUM ELEMENTS

<u>Budget Dimension</u>	<u>Subfunction</u>	<u>Analytical Focus</u>
Planning/ Preparation	Preparation/cycles	Bureaucratic process
	Practices/interaction	Rules of the game
Execution	Info generation	Compliance/evaluation
	Info manipulation	Cost/benefit analysis
		Financial condition assessment
		Expenditure forecasting
		Costing-out techniques
		Revenue forecasting
	Statutory restrictions	Authority assessment
		Reporting requirements
	Cash flow	Expenditure/revenue forecasting
	Capital management	Asset/liability analysis
Evaluation	Cash management	Cost/revenue analysis
	Working capital	Risk analysis
	Debt management	Macroeconomics/investment skills
	Revenue forecasting	Revenue structure analysis
	Intergovernmental transfers	Grant management
	Procurement procedures	Authority requirements
	Information generation	Compliance reporting-ext
		Planning reports-int
		Evaluation-int
	Compliance audit performance	Accounting/auditing
		Program evaluation
		Productivity measurement
		Impact analysis
	Revenue/efficiency & equity	Information analysis
		Public finance

[Alexander, 1984]

In 1985, the American Society for Public Administration issued a report from its National Task Force on Curriculum Reform, sponsored by the Section on Budgeting and Financial Management (SBFM). The SBFM reviewed the history of financial management education, and put forward recommendations for curriculum design and skill concentration. Table 8 lists the core skills recommended by the Task Force for inclusion in all public financial management programs:

TABLE 8. CORE SKILLS RECOMMENDATIONS

Budgeting
Accounting & Auditing
Revenue Analysis
Expenditure Analysis
Forecasting
Financial Condition Analysis
Fiscal Impact Analysis
Short Term Asset and Liability Management
Capital Planning and Debt Management
Pension Planning and Management
Risk Management
Financial Modeling
Comparative Budgeting & Financial Management

[American Society for Public Administration, 1985]

The National Task Force report emphasized that there was no "one best" curriculum design; schools should be allowed flexibility to tailor their curriculum to meet the demands and expectations of their student communities. The Task Force did, however, recommend that approximately 1/3 of a public financial management program consist of core financial management courses. Table 9 is an example program

to illustrate the content of public financial management programs, following the Task Force recommendations:

TABLE 9. AN ILLUSTRATIVE PUBLIC FINANCIAL MANAGEMENT PROGRAM

- 1) Financial management including debt management.
- 2) Public economics including cost/benefit analysis and pricing.
- 3) Governmental accounting.
- 4) Public finance.
- 5) Budgeting.
- 6) Advanced financial management.
- 7) Financial markets.
- 8) Managerial (cost) accounting.
- 9) Cash and securities management.
- 10) Management information systems.
- 11) Borrowing and debt management.
- 12) Forecasting methods and applications.

[American Society for Public Administration, 1985]

In an analysis of public financial management curricula published in 1991, Jones observed that inconsistencies in the curricula of public financial management programs could weaken the occupational preparation and competitiveness of graduates. [Jones, 1991]. He cited a paucity of instruction in public sector oriented degree programs in accounting principals, financial management concepts and analytical techniques as the main deficiencies. Jones designed a model financial management curriculum, emphasizing management control in both overall content and course sequencing. The emphasis of this model is on management, as opposed to generic public administration. The courses build sequentially upon each other, systematically increasing the cumulative knowledge base of

students. Table 10 provides the framework of the Jones model:

TABLE 10. JONES MODEL OF A PUBLIC FINANCIAL
MANAGEMENT CURRICULUM

-
- 1) Introduction to management control.
 - 2) Introduction to financial, managerial, and non-profit accounting concepts and practices.
 - 3) Cost accounting.
 - 4) Public financial management.
 - 5) Public budgeting.
 - 6) Financial management information systems.
 - 7) Cash management, investment, and debt management.
 - 8) Performance auditing.
-

[Jones, 1991]

Jones noted that the courses in this sequence, coupled with other courses to be offered in statistics, public policy process & analysis, micro/macro economics, cost/benefit analysis, project planning and management, procurement, and public finance would round out the FM program and provide a well-balanced and competitive curriculum. The courses offered constitute the various phases of the public organization financial management control cycle. There is no single "ideal" financial management curriculum agreed to by the public financial management academic community. The Task Force's recommendations and Jones model offer suggestions that may be implemented to improve existing programs and shape future curricula.

**B. CRITERION #4 - THE NPS FINANCIAL MANAGEMENT PROGRAM,
CONTENT, COVERAGE AND COMPARISON TO THE MODELS**

Table 11 indicates the courses currently taught in the financial management curriculum at NPS. In comparing the NPS FM program to the models, the following may be noted. First, the NPS "Accounting" module meets and exceeds the recommendations of the Task Force and Jones models. Second, the NPS program complies with Jones recommendations for economics and statistical courses. Third, the NPS "Management" module is comprehensive, but lacks a course in public and non-profit sector financial management, instead providing courses on Navy and DoD budgeting and financial management. Fourth, NPS currently offers no instruction in personnel administration. However, a Total Quality Management/Total Quality Leadership (TQM/TQL) course has recently been added to the list of curriculum options. Fifth, the "Analytical" module of courses is sufficient to meet the requirements of the other curriculum modules. Sixth, the NPS "Public Policy" module more than adequately introduces, discusses and critiques public policy processes, politics, and public budgeting, but general public financial management is not offered. Seventh, the NPS "Computer" module covers information systems courses, but offers minimal hands-on education, perhaps a shortfall in today's information age. Eighth, the only course in the curriculum, supplementary to the NPS FM program in the "Other" category

is a national defense/maritime strategy course mandated by the Secretary of the Navy.

TABLE 11. NPS FINANCIAL MANAGEMENT CURRICULUM

- 1) Financial accounting
- 2) Managerial accounting
- 3) Cost accounting
- 4) Internal control & auditing
- 5) Macroeconomics
- 6) Microeconomics
- 7) Cost/Benefit analysis
- 8) Managerial communication skills
- 9) Organization and Management
- 10) Management control systems
- 11) Strategic management & policy
- 12) Systems acquisition & project management
- 13) Financial management in the armed forces
- 14) Math for management
- 15) Statistical analysis for management
- 16) Operations research for management
- 17) Public policy processes; government budgeting
- 18) Public policy analysis
- 19) Expenditure analysis
- 20) Computer skills development & application
- 21) Management information systems
- 22) National defense/strategy

[NPS, 1992]

C. CRITERION #5 - NAVY AND DOD FINANCIAL MANAGEMENT PROGRAM CONTENT AND EMPHASIS

Navy and DoD content emphasis is not present to any significant extent in any of the programs included in this study, except in programs sponsored by the three military departments. Each military department of the DoD has their own graduate financial management program. As noted, the Navy (including the Marine Corps) MS program is offered at NPS. The Army utilizes an MBA program at Syracuse University, and the Air Force offers an MS program at their

Air Force Institute of Technology (AFIT). Figure 1 compares the three programs by course area coverage.

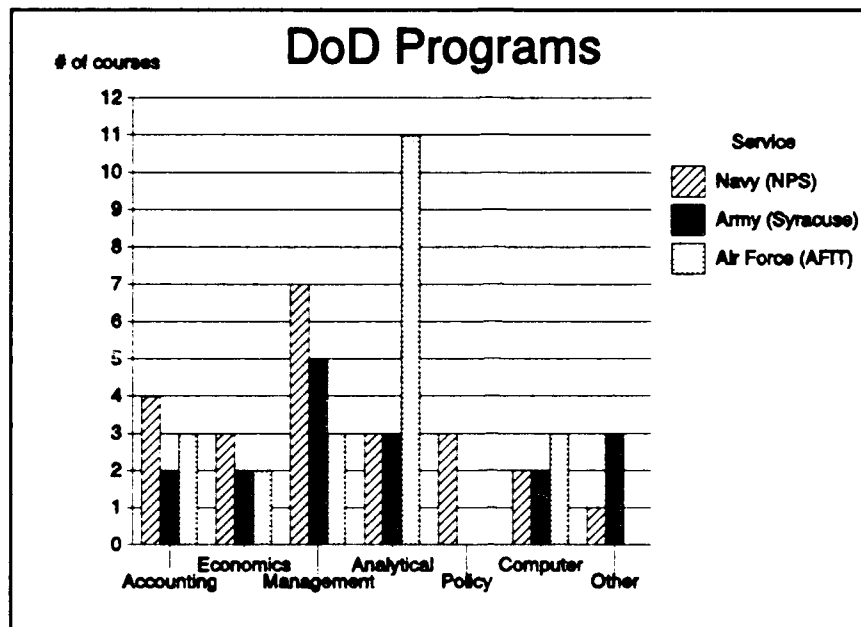


FIGURE 1.

The Army program in the Maxwell School at Syracuse University is attached to an MBA curriculum, with two Army Comptrollership courses provided at the end of the program. Comparing the Syracuse program to the NPS program, the following conclusions may be drawn. First, the Syracuse program is thin in accounting and economics. Second, the management program is directed generally toward the private sector. It includes marketing and operations management courses, but it lacks management control systems or systems acquisition and management emphasis. Third, the Syracuse analytical module appears to be comparable to that of NPS. Fourth, the program has no courses covering public policy

processes, policy analysis or politics. Fifth, the Syracuse "Other" module contains an Ethics course, an Administrative Policy course and a National Defense course that appears to be similar to the Secretary of the Navy maritime strategy course taught at NPS. Sixth, the Syracuse program is less quantitative than the NPS program. The lack of any public policy-related courses, however, may be a handicap in preparing students for future Army or Joint DoD assignments requiring budget skills, or knowledge of the politics of resource negotiation between the DoD and Congress.

The comparable Air Force program at AFIT is the Graduate Cost Analysis Program. This program blends general management and quantitative analysis skills, focused primarily on cost analysis. Comparing the AFIT curriculum to the NPS curriculum leads to the following observations. First, the AFIT "Accounting" and "Economics" modules are similar to those of NPS. Second, the AFIT management module does not include Systems Acquisition and Management, Strategic Management and Policy, Management Control Systems or Organization and Management. Third, the most glaring difference between the NPS and AFIT programs is in the "Analytical" module. The "Analytical" module at NPS includes a basic orientation in mathematics, statistics and operations research for managers. The "Analytical" module at AFIT provides what is essentially technical occupational training versus broad graduate level education. The AFIT

program includes; Mathematics for Engineers, two courses in Statistics for Cost Analysis, Operations Research for Cost Analysis, Cost Estimation for Weapon System Production, Defense Cost Modeling, Model Diagnostics, Research Methods, Software Cost Estimation, Seminar in Cost Analysis, and a series of Cost Analysis Colloquiums. Fourth, similar to the Army program at Syracuse, AFIT offers no instruction in public policy processes, policy analysis or politics, and there is little or no course offering in budgeting or in DoD relations with Congress. Fifth, AFIT has no maritime strategy or national defense type course in their curriculum similar to what NPS and the Army offer. Overall, the AFIT curriculum appears to be designed to produce highly skilled cost analyst technicians, but the narrowness of this curriculum could limit student comprehension of the "big picture" in DoD and federal financial management.

In general, the Navy program attempts to educate public managers, the Army program is oriented towards business, and the Air Force program trains cost analysts; three different services with three different approaches.

Finally, it must be reiterated that none of the other MBA or MPA programs evaluated in this study had any Navy or DoD emphasis or content. However, it should be noted that some Navy officers attend civilian institutions in pursuit of a graduate degree and a Navy subspecialty code. The list

of schools where Navy graduate students are currently studying financial management is as follows:

San Diego State University
University of N. Florida
Marymount University
Florida Inst of Technology
University of Pennsylvania

Harvard University
University of W. Florida
Cal State Long Beach
Georgia Tech
Stanford University

One hundred percent of these students are engaged in an MBA course of study. Upon completion they will be awarded the same subspecialty code, xx31, that graduates of the NPS FM program receive. A comparison of the NPS program and MBA programs is presented subsequently.

D. CRITERION #6A - COMPARING THE NPS FM PROGRAM TO MPA PROGRAMS BY CONTENT AND EMPHASIS

Figure 2 provides a comparison of the NPS FM curriculum and an average of the MPA curriculum modules presented in Chapter II, with attention to the relative level of government emphasis in the programs.

The MPA degree offered at most institutions in the sample prepares students for positions in local and state government. There are a number of specialized programs offered in health care administration, urban planning, policy study, political science, public management, international management and public financial management, just to name a few. Some MPA programs are very structured, some are not. For example the MPA curriculum at Harvard University is entirely elective:

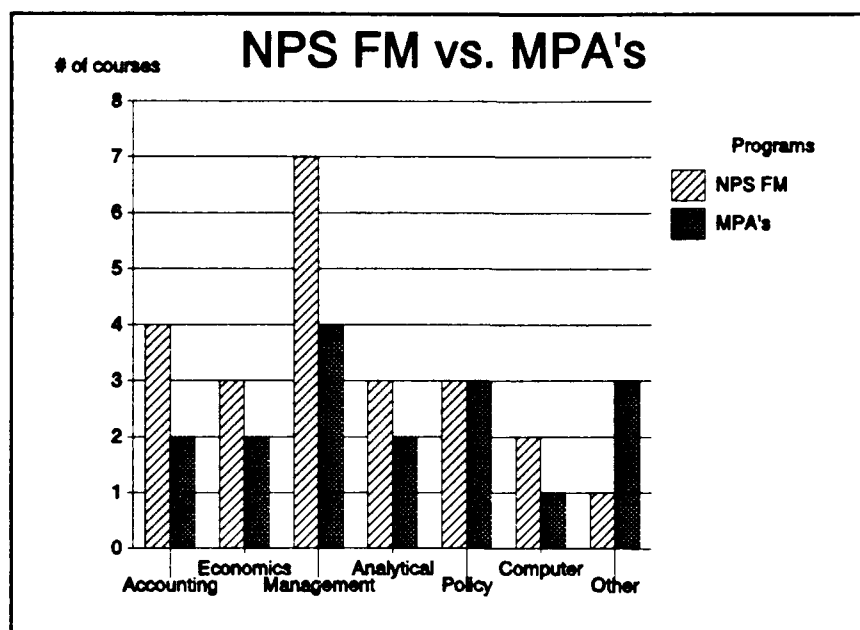


FIGURE 2.

"The MPA program offers the student the flexibility to design a course of study that will satisfy his or her needs and interests." [Harvard University, 1991]

Using an across-the-matrix comparison approach, the following conclusions may be made. First, little emphasis in accounting is found in MPA programs compared to the NPS curriculum. Only 34% of the MPA schools require financial and or managerial accounting. Many have "Government Accounting" courses, but 28% have no accounting requirements whatsoever. The average number of required accounting courses is two. Second, 61% of the MPA programs require a macroeconomics or microeconomics course, but only 17% have any instruction in cost/benefit analysis. The average number of economics courses is two.

Third, the MPA management module comparison has three common threads across the curricula. Seventy-five percent of the MPA programs require an Organization & Management course, a Public & Non-Profit Financial Management course, and/or a Personnel Administration/Human Relations Management course. There are a few courses in management control systems, strategic management/policy, and labor relations/collective bargaining present in some of the programs. The management emphasis is clearly geared towards public organizations but is less comprehensive than the NPS program. The average number of management courses is four. Fourth, the Analytical module courses primarily consist of statistical analysis and quantitative methods for research. The average number of MPA program analytical courses is two.

Fifth, the MPA Public Policy module requirements are similar to the NPS requirements. Public policy, as stated earlier, is the primary focus of most MPA programs. All of the MPA programs require some sort of policy processes, policy analysis, public budget/finance and expenditure analysis course work. Several schools offer Bureaucracy & Public Affairs and Intergovernmental Relationships & Policy courses. The average number of public policy courses is four.

Sixth, the MPA programs require fewer computer, information systems-type course work than NPS. The MPA program data is equally split between a hands-on computer

skills course offering, an information systems course, or no computer/information system course requirements. This dearth of computer and information system technology instruction appears to be a shortfall in this information age. The average number of computer courses was one.

Seventh, the "Other" module is an area of major differences between the NPS and MPA curricula. Forty percent of the MPA programs require a legal or ethics course, and 77% have some sort of Public Administration course/seminar, or an Administration Theory/Policy course/seminar. Overall, the MPA programs are more general in administrative and management focus, or are more specific by emphasis area, e.g. health care administration.

E. CRITERION #6B - COMPARING THE NPS FM PROGRAM TO MBA PROGRAMS BY CONTENT AND EMPHASIS

MBA programs are offered at hundreds of colleges and universities across the country. This thesis research includes selected prominent schools and some more "average" schools that offer some public sector curricula. The MBA programs included in the sample are:

Indiana University	Kent State University
Michigan State University	Ohio State University
Stanford University	Syracuse University
University of Pennsylvania	

Figure 3 compares the NPS FM curriculum and an average of the MBA programs relative to the curriculum modules developed in Chapter II.

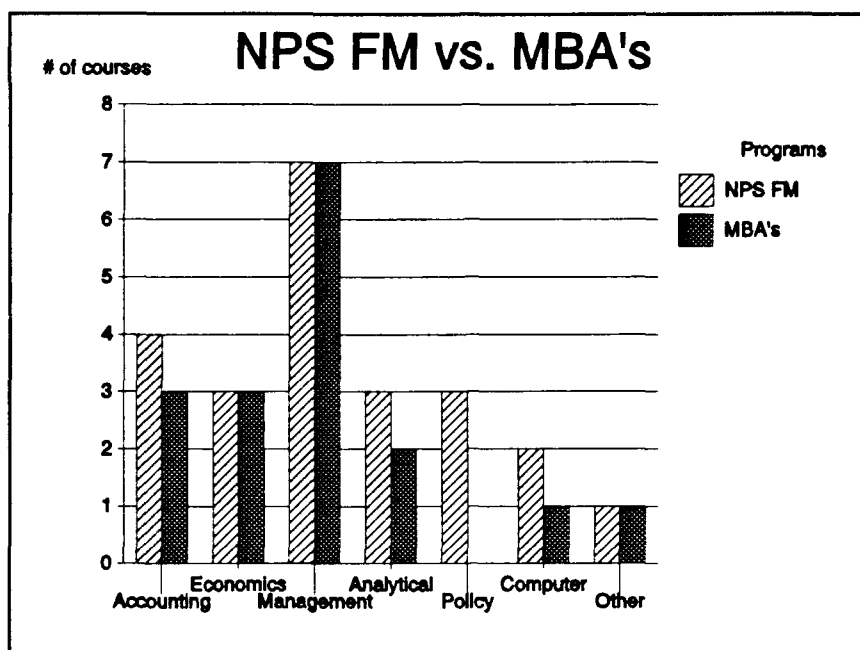


FIGURE 3.

An MBA is designed to prepare students for positions in business and industry rather than for work at any specific level of government. The programs do not routinely concern themselves with public management and administration issues. However, some business schools offer special public sector emphasis in their MBA programs, e.g., Stanford University. There are some similarities between MBA programs and the NPS FM curriculum. First, in the accounting module, most MBA programs mirror the accounting requirements at NPS. The average number of accounting courses, nevertheless, is three. Second, the MBA programs all require microeconomics and macroeconomics. Some programs require courses in cost/benefit analysis, managerial economics or international

economics. The average number of economics courses is three.

Third, Figure 3 may be misleading in considering the management module. While the number of courses required in the MBA programs is the same as at NPS, the content and emphasis of the courses is drastically different. The NPS FM curriculum emphasizes general & strategic management, communications, management control systems and DoD financial management. The MBA curricula stress securities management, marketing, logistics, portfolio management, corporate and business finance, operations management, banking, business policy, and personnel & human resources management. The average number of management courses is seven.

Fourth, most of the MBA programs require statistics for management, and the ubiquitous course in quantitative methods. Surprisingly, little is offered in operations research. The average number of analytical courses is two. Fifth, it is significant that none of the MBA programs surveyed have any public policy course requirements. While this a logical exclusion in a business school, graduates may be at a distinct disadvantage in managing government entities or in public political processes. The lack of public policy requirements could be a major weakness for Navy graduate students studying in MBA programs. Many students must return to the fleet without the knowledge and understanding of public policy that graduates of the NPS FM

program acquire. The average number of MBA program public policy courses is zero.

Sixth, in the computer module, the MBA programs concentrate on management information systems. Several schools have hands-on computer training associated with their accounting and finance courses, and a generally high level of computer utilization is evident. The average number of computer courses is one. Seventh, the "Other" category consists of various versions of "The Legal Environment of Business." Eighth, 50% of the schools have no thesis requirement, and 50% have a thesis in lieu of more class work option. This is a major difference relative to NPS graduation requirements.

Overall, the MBA is a good degree program for those with career interests in business and industry. However, the absence of public policy courses could work against the graduate attempting to cope with public policy process and the political/budgeting establishment of the Navy, DoD, and federal government.

F. CONCLUSIONS

An original bias in this research was that it would be easy to find a public financial management program at another school that was more comprehensive than the Naval Postgraduate School's Financial Management program. However, the data does not support this assumption. The MPA and MBA degrees offer quality education aimed at specific

segments of our society. The NPS FM curriculum offers what is essentially a hybrid of these two very special and useful degree programs. Figure 4 compares the NPS FM, MPA and MBA curricula.

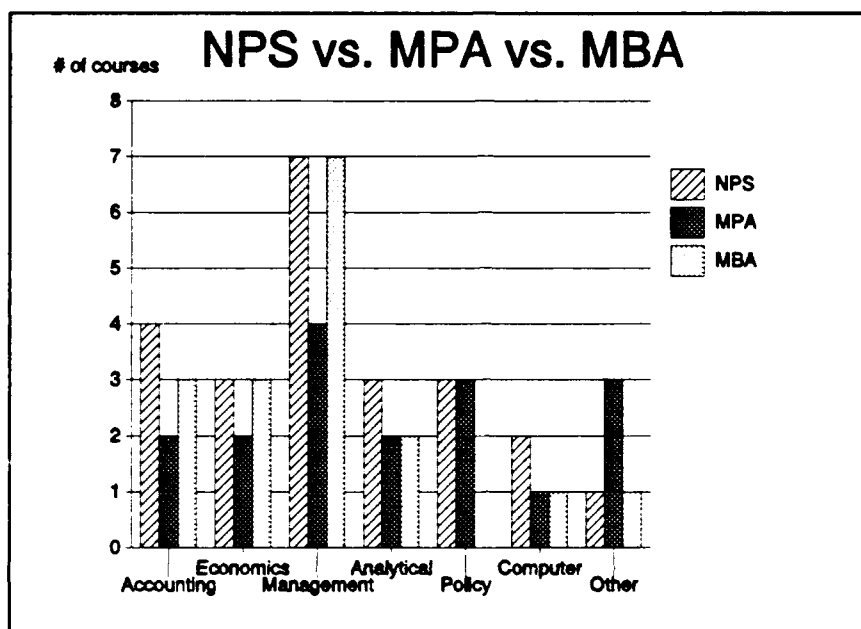


FIGURE 4.

The NPS FM program provides accounting, economics, management theory, analytical, and computer courses similar to the MBA programs, plus public policy and budgeting similar to the MPA programs. Further it has unique Navy, DoD and federal government content and emphasis. The NPS program appears to be well balanced to satisfy fully both the military and general graduate education requirements of the sponsor. There is always room for improvement, however. The recent addition of a TQM/TQL option to the NPS FM curriculum is one such step. Further, more hands-on

computer instruction integrated into the accounting, economics, management control systems, statistics and operations research courses could be helpful. And, as noted, the absence of a specific public financial management course in the NPS FM curriculum is a weakness relative to many MPA programs surveyed in this research project.

One further issue may be noted. Large class size is sometimes a problem at NPS. For example, one Management Information Systems class currently offered has 119 students; hardly an environment for hands-on training. The average student:faculty ratio at NPS as a whole is 9:1. In the Administrative Sciences Department where the FM curriculum is taught it is 7:1. The average ratio in graduate education institutions throughout the U.S. is approximately 6:1. Still, with a few adjustments, the NPS FM curriculum will continue to provide a quality, relevant educational experience for Naval and Marine Corps Officers well into the next century.

IV. CONCLUSION

A. A FINAL COMPARISON

The financial management program at the Naval Postgraduate school combines the curricula offered in many MBA and MPA degree programs. It is a unique course of instruction, designed by the Navy, to meet Navy requirements. It is more than that, however, and in this final chapter, the NPS FM program is compared to four other programs considered to be among the best in their fields by the academic community. Specifically, NPS is compared to the MBA program at Stanford University, the MBA program at the Wharton School, University of Pennsylvania, the PhD in Public Administration program at the State University of New York at Albany that offers a special course of study in public financial management, and the MPA program at Indiana University reputed to be the strongest public budgeting and financial management program in the U.S.

Figure 5 compares NPS to the four curricula and the following conclusions may be drawn relative to program strengths and weaknesses. First, NPS dominates the accounting module relative to the other programs with four required courses. Stanford requires only financial and managerial accounting, Albany requires a budgeting and

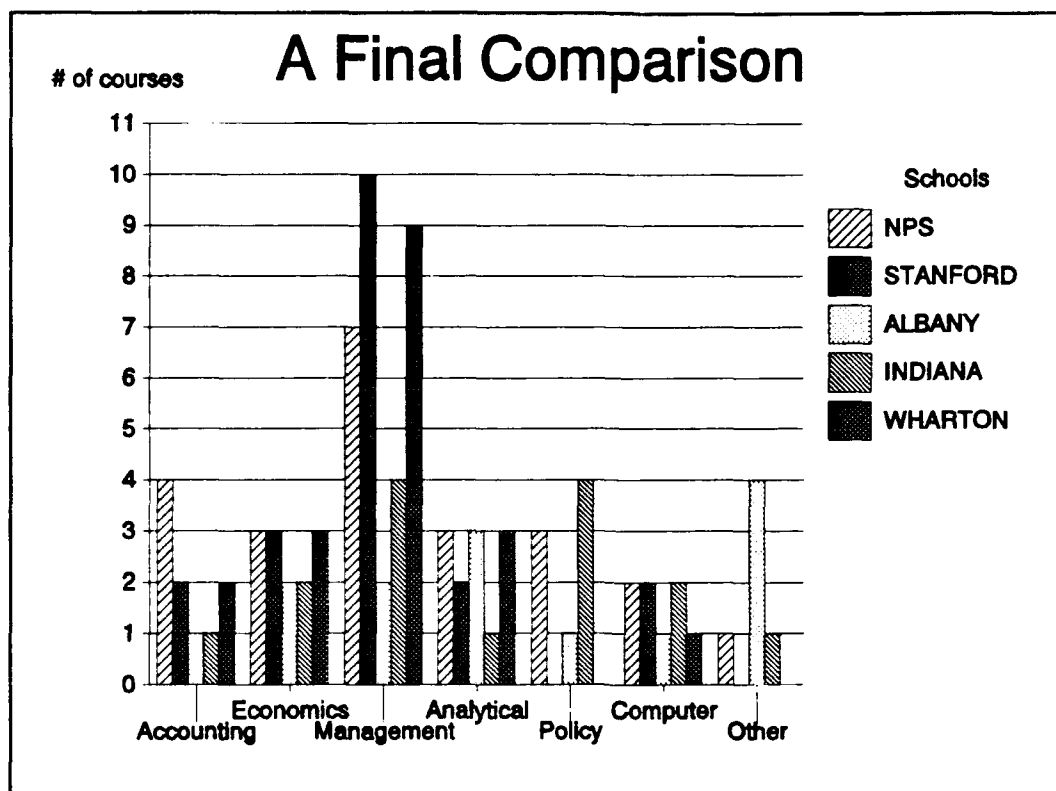


FIGURE 6.

accounting course, Indiana offers an optional accounting for public administration course, and Wharton requires financial accounting and financial analysis.

Second, the economics module is relatively even across these programs. NPS, Stanford, and Wharton require three courses, while Albany and Indiana require two courses. Third, as expected given the overall management emphasis of their programs, Stanford and Wharton offer more in the management module with ten and nine required courses, respectively. The courses are significantly different, however, in both content and emphasis than the courses offered at NPS, Albany or Indiana, and include marketing

management, corporate decision making, business and the environment, and operations management. The management focus at NPS is more Navy, DoD and public sector oriented in nature, with emphasis on communications, management control systems, systems acquisition, and Navy and DoD financial management. Albany provides human resources management, and organizational theory and management. The management requirements at Indiana concentrate on public organizations and include public management and public/non-profit financial management. Fourth, the analytical module is not very comparable across these institutions. NPS, Albany, and Wharton require three courses, a combination of mathematics for management/business, statistical analysis for management, operations research (NPS), and quantitative/research methods (Albany and Wharton). Stanford requires two courses, data analysis and quantitative methods, while Indiana requires only one course in statistical analysis for public affairs.

Fifth, the public policy module is dominated by the public sector programs. NPS requires courses in policy processes, policy analysis, and expenditure policy and analysis. Albany's single required course is politics and administration. Indiana's curriculum contains four public policy courses; program evaluation, environmental policy analysis, finance and budgeting, and financial administration. The Stanford and Wharton business schools

do not require any specific public policy courses.

Sixth, the computer skills module offerings are fairly even across the programs. NPS, Stanford, Wharton, and Indiana concentrate on information systems education while Albany offers a Computing for Public Administration course. Seventh, Albany offers more in the "other" module with an introduction to public administration course, a foundations of public administration course, and a legal environment of public administration course. Finally, NPS requires a master's thesis and as a PhD program, Albany requires a doctoral dissertation. However, Stanford, Indiana, and Wharton do not have thesis requirements. As noted earlier in this thesis, the majority of comparable programs do not require theses.

Overall, the core financial management program at NPS appears to be more comprehensive in total breadth of public sector FM courses offered than these four other schools that are reputed to be among the best of the MBA, MPA and PhD in public sector programs offered in the United States.

B. ANSWERS TO THE THESIS RESEARCH QUESTIONS

The research questions listed previously have been answered in this thesis. To summarize the findings, first, school curricula were chosen for comparison from programs accredited by the National Association of Schools of Public Affairs and Administration, and also included prominent business and management schools with public sector programs.

The NPS FM curriculum was compared to 54 MPA, MBA and MA curricula, and to one PhD program. Second, criteria for comparison were developed utilizing models of "ideal" comprehensive financial management curricula content and structure. Third, curricula were compared according to the criteria and the following conclusions were drawn.

- 1) The NPS program offers a unique combination of MPA and MBA subjects. On the basis of this study, there is no other public financial management program offered in the U.S. that meets the financial management needs of the Navy as well as the NPS FM curriculum.
- 2) The NPS program is superior to MPA curricula in accounting, economics and management.
- 3) The NPS program is superior to MBA curricula in its concentration in public sector management, and public policy study.
- 4) Relative to other DoD programs, the NPS program educates public managers, while the Army program is oriented towards business, and the Air Force program focuses on cost analysts.
- 5) Navy students studying in programs at civilian institutions seeking an XX31 (financial management) subspecialty code are all pursuing an MBA degree. Because MBA programs do not offer public financial management, this calls into question the adequacy of preparation of these students for the XX31 designation.

Several recommendations for improvement of the NPS FM program also were developed. First, more hands-on computer instruction could be integrated into the accounting, economics, management control systems, statistics and operations research courses offered at NPS. Second, the addition of a public sector financial management course, in addition to the current Navy/DoD oriented financial

management course and the public policy processes courses could enhance the quality of the NPS FM program. Third, NPS FM program class size should be reasonable for the nature of the subject and type of instruction offered, e.g. a case study discussion course should have a smaller class size than an acquisition lecture. Large class sizes at the graduate level at times inhibit the students learning experience.

C. CONCLUSION

Defense budgets are likely to continue to shrink in response to changing national priorities and global events. A corps of well educated financial managers will be essential in guiding the Navy through the expected lean budget years of the 1990's and beyond. The research for this thesis leads to the conclusion that no program offered in the U.S. is better designed to meet the financial management education needs of the Navy and Department of Defense than the financial management program offered at the Naval Postgraduate School. The program offers a comprehensive FM program that meets the requirements of the sponsor, and is a course of study that the Navy can depend upon to educate financial managers to handle present and future fiscal challenges into the next century.

APPENDIX

Colleges and Universities polled for this study:

Air Force Institute of Technology	Sangamon State University
American University	Shippensburg University
Arizona State University	Southern Illinois University
Arkansas State University	SW Texas State University
Brigham Young University*	Stanford University
Cal State Fullerton	SUNY Albany
Cal State Long Beach	Syracuse University
Cal State Los Angeles	Temple University*
Canisius College	Tennessee State University
Carnegie Mellon University*	Texas A&M University
Clark Atlanta University	Texas Technological University
College of Charleston	Troy State University*
Columbia University*	University of Akron
Drake University	University of Alabama
Eastern Washington University	University of Arizona
Florida Atlantic University	University of Baltimore
Florida International University	University of Chicago
Florida State University*	University of Cincinnati*
George Mason University*	University of Colorado
George Washington University	University of Connecticut
Georgia State University	University of Georgia
Golden Gate University	University of Idaho
Harvard University	University of Kentucky
Idaho State University	University of Maryland
Indiana University	University of Massachusetts
Jackson State University	University of Michigan*
John Jay College	University of Minnesota
Kansas State University	University of Missouri
Kent State University	University of New Mexico
Lewis & Clark University	University of North Florida
Long Island University	University of North Texas
Louisiana State University	University of Pittsburg
Michigan State University	University of South Florida
Montana State University	University of S. California
Murray State University	University of Southern Maine
Naval Postgraduate School	University of TX-El Paso
New York University	University of TX-Pan American
N. Carolina State University	University of TX-San Antonio*
Northern Illinois University	University of Toledo
Ohio State University	University of Washington
Old Dominion University	University of West Florida
Pace University*	Virginia Commonwealth Univ
	Wayne State University

Pennsylvania State University
Rutgers University*
Saint Louis University*
San Diego State University

Wichita State University
Willamette University

* Schools that did not respond to the survey.

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