

WHO WILL SERVE?

EDUCATION, LABOR MARKETS, AND MILITARY PERSONNEL POLICY

by

Lindsay P. Cohn

Department of Political Science
Duke University

Date: _____

Approved:

Peter D. Feaver, Supervisor

David Soskice

Christopher Gelpi

Tim Büthe

Alexander B. Downes

Dissertation submitted in partial fulfillment of
the requirements for the degree of Doctor
of Philosophy in the Department of
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ABSTRACT

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Abstract

Contemporary militaries depend on volunteer soldiers capable of dealing with advanced technology and complex missions. An important factor in the successful recruiting, retention, and employment of quality personnel is the set of personnel policies which a military has in place. It might be assumed that military policies on personnel derive solely from the functional necessities of the organization's mission, given that the stakes of military effectiveness are generally very high. Unless the survival of the state is in jeopardy, however, it will seek to limit defense costs, which may entail cutting into effectiveness. How a state chooses to make the tradeoffs between effectiveness and economy will be subject to influences other than military necessity.

In this study, I argue that military personnel management policies ought to be a function of the interaction between the internal pressures of military mission and the external pressures of the national economic infrastructure surrounding the military. The pressures of military mission should not vary significantly across advanced democratic states, but the national market economic type will. Using written policy and expert interview data from five countries, this study analyzes how military selection, accessions, occupational specialty assignment, and separations policies are related to the country's educational and training system, the significance of skills certification on the labor market, and labor flexibility. I evaluate both officers and enlisted personnel, and I compare them across countries and within countries over time. I find that market

economic type is a significant explanatory variable for the key military personnel policies under consideration, although other factors such as the size of the military and the stakes of military effectiveness probably also influence the results. Several other potential explanatory factors such as the ease of recruiting appear to be subordinate to market economic type in predicting policy.

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List of Abbreviations

AMAR...Algemeen militair ambtenarenreglement (Netherlands - General Regulations for Military Personnel)

AAC...Aanstellings en Advies Commissie (Netherlands - Appointments and Advisory Committee)

ACE...American Council on Education

ACT...A university entrance aptitude examination in the United States

AFQT...Armed Forces Qualification Test (USA - portion of the ASVAB used to score applicants)

AGAI...Army General Administrative Instruction (UK)

AOSB...Army Officer Selection Board (UK)

AR...Army Regulations (USA)

ASVAB...Armed Services Vocational Aptitude Battery (USA - aptitude test)

AVCE...Advanced Vocational Certificate of Education (UK - higher vocational secondary degree)

BARB...British Army Recruit Battery (UK aptitude test)

BBT...Beroeps Bepaalde Tijd (Netherlands - temporary-career service-members)

BOCO...Begeleidingsorganisatie Civiel Onderwijs (Netherlands - Civil Education Guidance Organization)

BOT...Beroeps Onbepaalde Tijd (Netherlands - full-career service-members)

BTEC...Business and Technology Education Council (UK)

CCME...Continental Coordinated Market Economy

CLM...Command, Leadership, and Management education (UK)

CME...Coordinated Market Economy

CMF...Career Management Field (USA)

CWI...Centrale Organisatie Werk en Inkomen (Netherlands - Central Organization for Work and Income)

DANTES...Defense Activity for Non-Traditional Education Support (USA)

DFR...Defence Forces Regulations (Ireland)

D HRMS...Director of Human Resources Management Services (Ireland)

EC...European Commission

EVC...Erkening van Verworvene Competenties (Netherlands - Accreditation (or sometimes "Recognition") of Prior Learning)

FÁS...Foras Áiseanna Saothair (Ireland - National Training and Employment Authority)

FETAC...Further Education and Training Awards Council (Ireland)

FMW...Faculteit Militaire Wetenschappen (Netherlands - Faculty of Military Sciences at the KMA)

FWDLer...Freiwillig zusätzlichen Wehrdienstleistender (Germany - a conscript who has volunteered to serve for longer than the basic nine months, up to two years)

GABT...Netherlands military entrance aptitude examination for those with no secondary school leaving certificate

GCE...General Certificate of Education A-level or AS-level (UK - higher general secondary degree)

GCSE...General Certificate of Secondary Education (UK - lower general secondary degree)

GED...General Educational Development certificate (USA high school diploma)

equivalent)

GNVQ...General National Vocational Qualification (UK - lower vocational secondary degree)

GPA...Grade Point Average (USA - a measure of achievement in secondary schooling)

GWDLer...Grundwehrdienstleistender (Germany - a conscript in his first nine months of service)

HAVO...Hoger algemeen voortgezet onderwijs (Netherlands - senior general secondary education)

HBO...hoger beroepsonderwijs (Netherlands - higher professional education)

IDF...Irish Defence Forces

ILO...International Labour Organization

IRC...Intermediate Regular Commission (UK)

KMA...Koninklijke Militaire Academie (Netherlands Officers' Academy)

KMS...Koninklijke Militaire School (Netherlands NCOs' Academy)

LME...Liberal Market Economy

MBO...secundair beroepsonderwijs (Netherlands - secondary level vocational education)

MCM...Manual for Courts Martial (USA)

MEPS...Military Entrance Processing Station (USA)

MOS...Military Occupational Specialty

NCO...Non-Commissioned Officer

NQAI...National Qualifications Authority Ireland

NUI...National University Ireland, Galway

OCS...Officer Candidate School (USA - the post-university route to officer service)

OKM...Opleiding Kort Model (Netherlands - officer commission with short training period and limited promotion potential)

OLM...Opleiding Lang Model (Netherlands - officer commission with longer training period and unlimited promotion potential)

OPA...Opleiding Post-Academisch (Netherlands - officer commission for those with post-secondary degrees, shorter training period and unlimited promotion potential)

OPZ...Offizierbewerber Prüfzentrale (Germany - officer candidate testing center)

OS...Designation for hypotheses on Occupational Specialty Assignment

PaYS...Partnership for Youth Success (USA)

PDF...Permanent Defence Forces (Ireland - full-time military)

PQO...Professionally Qualified Officer (e.g. doctors, lawyers, chaplains)

QCA...Qualifications, Curriculum, and Assessment Authority (UK - body governing curricula, examinations, and skills qualifications)

QR...Queen's Regulations (UK)

RCP...Retention Control Point (USA)

RDF...Reserve Defence Forces (Ireland - part-time military reserve)

Reg C...Regular Commission (UK)

RMAS...Royal Military Academy Sandhurst (UK)

ROCs...Regionale Opleidings Centra (Netherlands - Regional Training Centers)

ROTC...Reserve Officers Training Corps (USA - a route to officer service through a civilian university)

SA...Designation for hypotheses on Selection and Accessions

SAT...A university entrance aptitude examination in the United States

SaZ...Soldat auf Zeit (Germany - temporary-career soldier)

SG...Soldatengesetz (Germany - Law on the Legal Status of Soldiers)

SLV...Soldatenlaufbahnverordnung (Germany - Regulations governing the career tracks of soldiers)

SSC...Short Service Commission (UK)

TC...Designation for hypotheses on Terms of Contract and Separations

TJAGS...The Judge Advocate General's School (USA)

UCAS...Universities and Colleges Admissions Service (UK)

USMA...United States Military Academy at West Point

VMBO...Voorbereidend middelbaar beroepsonderwijs (Netherlands - pre-vocational training)

VMBO (BBL)...Beroepsbegeleidende Leerweg (Netherlands - pre-vocational training block-release path)

VMBO (BOL)...Beroepsopleidende Leerweg (Netherlands - pre-vocational training vocational training path)

VoC...Varieties of Capitalism

VWO...Voorbereidend wetenschappelijk onderwijs (Netherlands - pre-university secondary education)

WO...wetenschappelijk onderwijs (Netherlands - research-oriented university education)

ZAW...Zivilberufliche Aus- und Weiterbildung (Germany - civilian further vocational training within the military)

ZDv...Zentrale Dienstvorschrift (Germany - General Service Regulations)

ZNwG...Zentrale für Nachwuchsgewinnung (Germany - regional central recruiting station)

1. Introduction

“I maintain, then, contrary to the general opinion, that the sinews of war are not gold, but good soldiers”

Niccolo Machiavelli, *Discourses on Livy*

A modern observer might believe that Machiavelli’s claim has been made obsolete by the march of technology, and that the sinews of war are now complex weapons and communications platforms. There is good reason to believe, however, that good soldiers are still the key not only to operational outcomes, but also to all the nuances of foreign policy which depend on military capabilities. For a country to have good soldiers, it must recruit and retain good people, but it must also manage them well. Human resources management in the military is essential both for its effects on recruiting and retention, and because it is a significant part of what makes soldiers into good soldiers. This study analyzes military human resources management in five developed democracies, in an attempt to understand forces that shape it. I argue that a military’s human resources policies will derive primarily from the interaction of two economic logics: one internal to the military and deriving from its unique mission, and one external to the military and deriving from the national labor market structure within which the military must function. I find that this interaction is indeed a significant factor shaping military personnel policies, although by no means the only such factor.

1.1 Why Personnel Quality Matters

Stephen Biddle (2004) has argued that force employment – the proper use of tactics and operational art – is at least as important as technology or material resources for operational outcomes. Biddle’s “proper” tactics, however, are very complex, and the clear implication of his argument is that success in the use of “proper” tactics depends largely on the quality of the individual people which a military is able to attract.

Peter Roman and David Tarr (2001) have argued that the character of top military commanders and the personal relationships they develop with the civilian leadership matter a great deal for the quality of civil-military relations and civilian control. This indicates that the processes which induce people to join the military in the first place, and which then channel people through the military to the top, or out of the organization altogether, must be important. If one of the main sources of advice for the government and lawmakers of a country is professional military officers, then it stands to reason that a state’s foreign policy decision-making mechanism depends at least in part on the competence and quality of the people who have made it to the top of the military organization. While training and socialization within the military organization are crucial, so are the policies which select, assign, and move people through or out of the organization.

A great deal of political and social controversy has been generated in more than one country by claims that certain groups of people are more likely – especially due to

economic pressure – to “bear the burden” of military service (e.g. Rangel 2003). Whether these concerns are borne out by the facts or not, they create tension and debate between society and the military. To some extent, civil-military relations depend on who is serving in the military and how they fit into society both in and after the service.

The bottom line is that people matter for outcomes. Who serves in the military is important for operational, political, and social outcomes, and if people matter, then so do the processes by which they are managed. It is therefore both interesting in its own right to see how various states manage their military human resources, and interesting to know whether those practices are governed by any larger logic that can be analyzed and manipulated.

1.2 A Larger Logic: Economics Inside and Outside

One of the reasons people matter, as mentioned above, is that military effectiveness depends on the accomplishment of certain tasks, and people must be able to accomplish those tasks. If this is the case, then it would make sense for governments to determine exactly what kinds of people and what kinds of structures the military’s basic tasks require, and then to base all their recruiting and military organization on that model. This is the economics within, and to a large extent, governments do attempt to do this. However, while military function does create clear demands in certain policy areas, its guidance may be ambiguous or non-determinate in others. It may in many cases allow for more than one type of person or organizational structure. It might also be

that the type of person or organization which the military's function requires is prohibitively expensive. It might be that the state's security situation is such that its military is not its top budget priority.

In short, there are a number of circumstances which may require the government to make non-obvious choices about how it wishes to organize its armed forces, either because the government's economic and military interests compete, or because the military interest does not provide clear guidance. Should the military be a skeleton structure that is fleshed out with citizen-soldiers in time of need? Should it be a large long-service volunteer force? Should it be capable of peacekeeping, high-intensity conflict, or both? Should it be arranged hierarchically, by function, or by some combination of the two? Should all the people in the military be trained initially the same way or should they all be functionally specialized early on? Should the military try to keep people for a long time and shed little, or try to get large numbers of new people in, requiring old people to be forced out? These are all questions about organization. Some of them refer to how people in the military relate to one another, and others refer to how the military relates to its service-members, but all have consequences for the individuals within the military, either on the battlefield or at home.

The question of how a government makes choices about these organizational issues, therefore, is an important one. A government might be concerned with prestige, or with social issues such as ethnicity, class, disability, or gender, or with socio-economic

issues such as welfare and unemployment. Any of these issues might influence a government's or parliament's decisions regarding the regulation of military personnel. Probably most likely to influence those decisions, however, is the issue of cost. It will cost money to recruit, train, equip, maintain, and retain all of those people, and the government will usually want to achieve its functional goals at the lowest possible costs. This is the economics without: how to interact with the rest of the economy, including particularly the labor market, but also service contractors and equipment providers, in the most efficient way?

1.2.1 Military Functional Imperatives

When Samuel Huntington (1957) introduced the concept of a functional imperative, he used it to describe an essential link between the danger, uncertainty, and violence of the military mission and the courage, discipline, and self-restraint that mission demanded of military officers. Charles Moskos (1988), in his criticism of the "institutional/occupational" shift, was in a sense claiming that the military mission places a functional imperative not just on the military's culture, but also on its organizational and personnel structure. While many later commentators have accepted the intuitive appeal of the concept of a functional imperative, the micro-links between the military's mission and any organizational or structural necessities are very seldom articulated. This study posits that one important link between the functional goals of a military organization and the structural "imperatives" is the people in the organization:

their physical capacity, their psychology, their morale, and so forth. One way to think of this is to think of how the interests of the institution and the interests of the individuals within the institution might be reconciled. There is a literature in political economy which has looked specifically at how the employer and employee must structure their relationship in order to reach an equilibrium outcome given their differing interests. This concept of “human capital” can be used to establish how the military’s functional goals might in fact determine certain structural needs. This in turn indicates which aspects of the military organization might be difficult to reform without adversely affecting the mission.

1.2.2 Imperatives of the National Economy

Employer-employee relations, however, are only one institution among many which together constitute a national economic system. There is another branch of literature on political economy which argues that the structures, practices, and institutions in an economy will tend to settle into self-reinforcing cycles, or equilibria, which are difficult to shift to another track. This idea, now known under the rubric of “Varieties of Capitalism” (VoC) (Hall and Soskice, 2001), claims that each different equilibrium or type of economy will produce a different outcome in terms of the production output and flexibility of the system.

If this is the case, then those aspects of the military organization which most closely resemble economic activity (e.g. contracting with employees, training, etc.) ought

to be subject to the same pressures as other actors in the economy to settle into equilibrium behavior. This “pressure” consists at least in part of the high costs imposed on an actor which does not conform to equilibrium behavior. Any government concerned with limiting costs must take the personnel practices of the larger economy into account.

1.3 Aims of the Study

These pressures from within and without, from the functional goals of the military and from the national economic context within which the military must operate, will impel the organization toward certain structural features, which may or may not be consistent with one another. Should these imperatives push against one another, it is reasonable to think that the functional goals will prove the stronger influence, since they constitute the rationale behind the organization’s existence. However, the Varieties of Capitalism argument would then predict that, where the organization insists on off-equilibrium behavior, there will be foreseeable economic consequences. In policy areas where the military mission yields no guidance, the economic environment ought to offer both a salient and an economically rational policy option.

This study has the aim of explaining the primary forces which produce the particular constellation of military personnel policies in a given country. In order to do that, I first apply the logic of Human Capital to military institutions and thereby gain an understanding of which of the military’s structural needs derive clearly from its

functional goals. Second, I evaluate a military's structural characteristics in the context of the civilian economy in order to determine how the two compare and relate to one another. The theory presented here argues that, while human capital considerations will cause militaries to look very much alike in many ways, the pull of the economic infrastructure surrounding the military will explain divergence in human resources practices.¹ I do this within the domain of developed western democracies, partly because that is where the market mechanisms have been most thoroughly studied and specified, and therefore where it is easiest and clearest to establish relationships between specific economic variables. It is also in part due to the need to control the non-economic factors influencing military issues, and militaries in developing and non-democratic countries generally occupy a different social and political role than they do in developed western democracies.

¹ The reason that we may expect militaries to look more like one another across national boundaries than firms do rests on the concept of comparative advantage. Different types of firms require different organizational and personnel characteristics, e.g. highly skilled workers or long-term capital. These characteristics are, in turn, supported (or not) by the national educational system, the banking and finance systems, etc. Firms which require personnel or forms of organization which are not supported by the national economic infrastructure will generally not be successful, and will tend to disappear from the economy. The firms which are left will be those which can survive given the type of economic infrastructure present. Militaries also require certain organizational and personnel characteristics, which may or may not be supported by the surrounding infrastructure, but they will not be selected out because the state has an interest in maintaining them even if they are not "profitable". Thus militaries may be expected to have certain things in common across national boundaries which firms in different countries lack, precisely because militaries are not entirely subject to the competition which other firms are. On the other hand, these militaries are not isolated from their economic contexts, and the logic of Varieties of Capitalism indicates that they must either conform (where possible) or suffer economic consequences.

1.4 Limitations

It is necessary here at the beginning to discuss a few of the issues this study will not be able to address directly, the most prominent of which is the problem of recruiting and retaining quality personnel. Recruiting and retention are major human resources problems, and I have stated that one of the reasons that the policies I discuss are important is because of their likely effect on military recruiting and retention. The theory I propose does produce a number of hypotheses on the recruiting and retention of quality personnel, which I explain in detail in Appendix A. In summary, I expect that militaries in Liberal Market Economies will (*ceteris paribus*) have less difficulty recruiting a high-quality pool of applicants than will those in Continental Coordinated Market Economies, and I expect that militaries in Continental Coordinated Market Economies will (*ceteris paribus*) have less difficulty retaining highly-skilled and highly-qualified individuals than those in Liberal Market Economies. Unfortunately, at the time that this study was carried out, it was not possible to get sufficient recruiting and retention data from the five militaries under study to test any hypotheses related to the comparative ease of recruiting and retaining “quality” personnel. Such data may be available in sufficient quantities within a few years, and a rigorous large-N analysis of recruiting and retention dynamics would be an excellent further test of the theory presented here.

The lack of data presented a number of difficulties for the study and the reasons for that may be of interest to other students of military and defense policy. Most simply, the data problems arose from the fact that, even when information exists, it does not automatically exist in the form of statistical data. First, this was in this particular case a result of European Union regulations on data protection. It is difficult and costly in the EU to justify collecting data on individuals unless it is for a pre-specified purpose, and even then it is not always possible. Second, and also extremely important, it takes resources – employees, man-hours, software – to create databases and enter data from individual records, and the vast majority of the European officials with whom I spoke emphasized that such resources were scarce in the context of defense budgets. Governments required data to be compiled *only* if they had a specific use in mind for the statistics. Therefore, most personnel information has not been compiled into data, and realistically speaking the historical data never will be. The only solution to this problem is to convince governments of the utility and legitimacy of compiling certain information into databases, and then waiting for several years until enough of it exists to do longitudinal analysis.

The most unexpected and most frustrating blank was the lack of any personnel data dating before approximately 1998 in Germany, the Netherlands, and the UK. The reasons for this varied slightly in each country, but in general, it was due to a failure to integrate previous paper-based records with new semi-electronic data collection

systems. In some cases, the information still existed, but only in the form of hundreds of thousands of paper documents stored in a warehouse. In other cases, the information either positively did not exist (in Germany for example, some information may not be kept beyond five years after a person has left military service), or it might have existed, but no one knew where it was. This includes data such as how many people were accessed, their educational status, test scores, grounds for separation from the organization, and so forth.

The planned statistical regression on recruiting and retention fell victim to the lack of sufficient longitudinal data to encompass economic cycles and avoid a degrees of freedom problem. The study that follows thus relies almost exclusively on qualitative rather than quantitative data, and looks at policies and practices rather than recruiting and retention “outputs”. While it is undoubtedly important to determine which factors affect recruiting and retention and in what ways, I believe the study presented here provide a unique and important insight into the unassuming but vital areas of military personnel policy and human resources management.

The problem of military unionization is also not addressed specifically in this study, primarily because of my desire to limit the number of private vs. military institutions being compared. A further reason is that, while unionization of military personnel might at one point in time have been mainly a function of market economic type, the phenomenon is currently heavily influenced by the dynamics of the European

Union, which makes it difficult to analyze in the context of this study.² I have tried to choose as dependent variables policies which are less likely to have been influenced by union activity, in order to avoid an omitted variable bias. Most service-members' associations in Europe (they do not exist in the United States) focus on issues of pay, holidays, health care, and pensions. They do not appear to concern themselves with occupational specialty assignment, selection processes, or even basic contract structure, although if any of my dependent variables were to be subject to union pressure, it would be redundancy and retirement ages. I have not looked specifically at how service-members' associations may have influenced their militaries' policies on redundancy and retirement, and while I do not believe that this point is likely to interfere with the tests of my theory, it is certainly worth a closer look in further studies.

Service-members' unions are a diverse group of institutions which do not all act alike. Some lobby government actively, others are more introspective and attempt to provide services to members. Some are all-inclusive, others are specifically for officers or for enlisted. In general, none has the right to strike. In addition to unions, some militaries have internal employee representation mechanisms, where service-members

² The Irish military has featured service-members' unions – one for the enlisted and one for the officers – since the 1980s. The British military has recently allowed the establishment of a service-members' association; it is not a union, but does have limited powers of representing service-members' interests. Both the Germans and the Dutch have long-standing service-members' unions which are active in advocacy. The British introduction of a service-members' union has been heavily influenced by EU institutions and dynamics, and both the French and Spanish militaries, which have long regarded such associations as illegal, are now considering them.

elect a spokesperson to represent their concerns and grievances to the chain of command. These internal structures also vary considerably in character, ranging from active negotiating positions to inside jokes.³ These institutions merit a study all their own, both in terms of how they actually function and what their effects are for foreign and domestic policy, organizational effectiveness, and individual employee behavior.

Finally, the theory tested here will be tested on only two values of the independent variable: Liberal Market Economies and Continental Coordinated Market Economies (see Chapter 2 for a more extensive explanation of these types). There are a number of reasons for this limitation. Within Coordinated Market Economies (CMEs), there is an important distinction between Scandinavian universalist CMEs and continental stratified CMEs (also known as the “Rhineland model”). Japan and South Korea are classed as Asian CMEs, but with special features which differ significantly from continental CMEs. Hall and Soskice (2001) note that France appears to be unique in terms of the organization of its economy, and that the other European countries of the Mediterranean rim may constitute another type altogether.

France’s uniqueness makes it a less desirable candidate for comparison in a small-N study, and the Mediterranean group has not yet been well specified in the economic literature. That left the option of comparing LMEs with Continental,

³ Elections are sometimes superfluous, for example, because there is a common understanding that the one person in the unit who cares about the institution will be the representative, and everyone else will ignore the entire process.

Scandinavian, and/or Asian CMEs. The qualitative nature of the analysis imposed both practical and analytical constraints on the number of countries I could include, and as it would be necessary to have at least two countries of each group under comparison, it was clear that I would have to limit the number of groups to two or three.

The Asian group was eliminated primarily on the grounds that military service in Korea is still heavily determined by conscription and it would therefore have been difficult to test hypotheses about market influences. Conscription is a government's deliberate attempt to isolate the military from market forces, and thus its existence is not an a priori obstacle for my theory, but it does make testing very complicated. While conscription is declining in importance in the Scandinavian countries, it remains a larger factor there than in the Continental countries, thus making the latter a more appealing group for theory testing. A further consideration was that Germany is a very attractive comparison state for the LME group, since it was the archetypal CME in early development of the Varieties of Capitalism idea. Thus, due on the one hand to limitations on the number of country-variables one human brain can process at once, and on the other to the inherent attractiveness of the Continental CME group as the home of the archetypal CME, I chose to compare only this group with the LMEs. Comparison with further CME groupings, and indeed any other market-types which may be identified, is certainly an avenue that should be pursued in the future. The specific variables I develop should be easy to identify in other market types.

1.5 Plan of the Study

The issues on which I have chosen to concentrate are those which I believe are important aspects of how a military organization manages and channels its personnel. This is not to say that these are the only policies that matter for those tasks, nor is it to say that managing and channeling are the only important issues related to personnel. This study is a first cut at applying a particular type of economic analysis to military organizations in the hopes that that will enhance our understanding of how these organizations work, how they may or may not be reformed, and what advantages and disadvantages they may have *vis á vis* their own labor markets. It should also shed light on our understanding of market economies in general, by indicating how to adapt current firm-based understandings to analyze public-sector economic actors.

The military organization straddles a difficult line between integration into its host economy and obedience to functional imperatives. The theory advanced in this study is that there are certain aspects of the host society's economic structure which may be used to predict both the economically rational strategy for the military and the potential consequences of deviation from that strategy. This is important information both for scholars of the military who wish to understand how the organization functions and why it develops the way it does, and for policy-makers who need to shape and manage the organization efficiently, effectively, and in a way that is socially acceptable. This is also an important issue for theoretical work in both the Comparative and

International Relations sub-fields of Political Science, as it provides a new way to understand a key aspect of the state apparatus: the characteristics and movement of personnel. This might be helpful information even for the formulation of aggregate-level theories which deny the significance of individual-level characteristics, by providing a clearer understanding of the issues involved.

This study aims primarily at testing the theory articulated above, which may then be refined and expanded in many directions. Almost equally important, however, it provides a detailed description of the internal workings of some of the most important personnel policies in modern western militaries. Militaries are too often treated as black boxes when it comes to their organization and personnel policies, but an understanding of these areas is crucial to any serious analysis of budgets, tactical and operational capabilities, personnel quality, recruiting and retention, social re-integration, and a host of other issues.

The next chapter explains the theory in depth and derives hypotheses for testing. Chapters 3, 4, and 5 deal with the empirical evidence on military selection and accessions policies, occupational specialty assignment and training, and terms of contract/separations. In each chapter, I review the relevant independent variables in the civilian economies of each country, then discuss the military policies in terms of the hypotheses, and conclude with an assessment of how well the hypotheses performed and suggestions for refining or re-testing. Chapter 6 concludes the study by

summarizing and analyzing the empirical results, and presents a number of implications and avenues for further research.

2. Labor Markets and Education: a theory of military manpower policies

I have claimed that the purpose of this study is to explain how the internal and external pressures on a military in an advanced democracy interact to produce a set of personnel policies. I have also mentioned that the internal pressures are unlikely to vary much, while the external pressures should vary significantly. Another way of stating the argument, therefore, is as an explanation of why military human resources management in developed western democracies appears to vary despite the many factors which would seem to argue for similarity.

Most western militaries have similar basic mission concepts and fill similar roles in their societies: they are designed to apply force in an organized manner and usually against external rather than internal actors. They have often had the opportunity to work together, train together, carry out operations together, and learn from one another. NATO has established certain minimum criteria for the military organizations of membership-hopefuls, which have served to encourage organizational convergence.¹ Many of these countries face very similar threats and tend to want to work together, which also promotes convergence. Furthermore, the recent historical development of most western militaries has followed very similar socio-economic lines, and one might

¹ The criteria NATO requires for membership are broad and outcome-based, and as such do not *necessitate* convergence; they merely present a potential incentive to converge on a salient model.

expect the class and occupational distinctions to persist across national lines. The striking similarity in the kinds of tasks which militaries must carry out seems to argue for a great deal of similarity in their organizational structures and practices.

Indeed, there are certain features of organizational structure which are universal to modern militaries, and it is worth considering those features briefly.² All modern militaries feature a division into services and branches (e.g. armies and navies, or infantry and armor), a division into units (e.g. platoon or brigade), a division into roles (e.g. officer or non-commissioned officer), and a division into ranks (e.g. sergeant or captain). Not all militaries feature the full range of potential categories; smaller militaries will generally include fewer branches and units.

Services and Branches

The term “military” is usually used in English to refer to the entire uniformed organization, to include all arms and branches. Militaries are always divided into Armies and Navies, often also independent Air Forces, and they sometimes have separate Marine Corps, Coast Guard, or paramilitary police forces such as the French

² This section does not give a history or evolution of military organizations. It is an empirical snapshot of the present day, and concentrates specifically on ground forces rather than navies or air forces. For more comprehensive accounts of the evolution of military organization, the reader may find Stanislaw Andreski’s *Military Organization and Society*, Michael Howard’s *War in European History*, Geoffrey Parker’s *The Military Revolution*, Martin van Creveld’s *Technology and War*, and John Keegan’s *A History of Warfare* useful and interesting.

Gendarmerie. This study concentrates on Armies, as they are generally the largest service branch, the least technologically-oriented, and the most challenged for recruits.

Armies are the land forces, generally organized and trained to do battle on land against other land forces. They are concerned with establishing and holding control over territory and the people belonging to that territory. They are normally divided up into branches, which are sometimes categorized as Combat Arms, Combat Support, and Combat Service Support (see Table 1 Army Service Branches). Combat arms are those branches which engage directly in combat. Combat Support involves those branches which support the combat arms directly but whose main function is not combat. Combat Service Support are the branches mainly concerned with logistics and services.

Table 1: Army Service Branches

Army		
Combat Arms	Combat Support	Combat Service Support
Infantry	Aviation	Quartermaster (logistics and supply)
Armor (tanks)	Military Intelligence	Adjutant (personnel)
Artillery	Military Police	Medical
Cavalry (mechanized infantry)	Chemical	Ordnance (armaments and bomb disposal)
Special Forces	Signals (communication)	Transportation
Engineers		Legal
Air Defense Artillery		Chaplain

Navies are usually organized and trained both for battle at sea and for major transport of the land (and sometimes air) forces. Naval officers tend to identify

themselves with the platform on which they serve: surface (ships), submarines, or aviation. Enlisted personnel will usually identify themselves with their functions.

Air Forces are organized and trained primarily for four missions: strategic bombing (classically defined as bombing at inter-continental distances), air-to-air combat, air-to-ground combat (close air support or interdiction in support of the ground forces), and transportation. Officers in an air force will often identify primarily with whether they are fighters, bombers, or transport. Enlisted personnel identify primarily with their specific functions.

Units

Part of the purpose of military organization is to allow people to work together to accomplish missions which would be impossible without teamwork and coordination. Militaries are therefore organized into nested groups. Here, I describe infantry organization by way of example; the other branches and service feature variations in both the size and names of some of the units described.

The smallest unit in the infantry is generally a buddy team of two or three people, which is more of a safety feature than a functional unit. It helps leaders maintain accountability for all their people by ensuring that no one gets isolated. The smallest functional unit is a fire-team (4-5 people). Two fire teams form a squad, and four squads generally form a platoon. Two to four (but up to eight) platoons form a company, and

two to six companies form a battalion. Three to six battalions form a brigade, two to four brigades (sometimes still called regiments) form a division, two or more divisions form a corps, and two or more corps form an army.

Table 2: Units

Unit	Number of Personnel	Sub-Units
Fire Team	4-5	
Squad	9-10	2 Fire Teams + Squad Leader
Platoon	18-44	2-4 Squads + Platoon Leader and Platoon Sergeant
Company	62-190	2-8 Platoons + HQ element (Company Commander (CO), Company Executive Officer (XO), Company Sergeant)
Battalion	300-1 000	2-6 Companies + HQ element (Battalion CO, Bn XO, Bn Sergeant Major, staff officers)
Brigade	3 000-5 000	3-6 Battalions + HQ element (Brigade CO, Bde XO, Bde Sergeant Major, staff officers)
Division	10 000-15 000	2-4 Brigades + Division Commander and staff
Corps	20 000-45 000	2+ Divisions + Corps Commander and staff
Army	50 000+	2+ Corps + Army Commander and staff

Elements of other branches may be mixed in to various units. These can either be organic parts, e.g. an infantry battalion normally includes one Headquarters company (including a mortar platoon) and a heavy weapons company. They can also be “attached”, e.g. an infantry company might have a squad of combat engineers attached to them to do a specific job. The regiment or brigade will often include battalion-sized units of infantry, artillery, and/or armor. Combat support and service support are organic to the division level, but in recent years have been re-organized to allow division

commanders to allocate them in battalion-sized elements (normally) to their brigades for operational purposes. This allows units smaller than division-size to conduct independent operations.

Roles

Broadly speaking, the historical division of roles in militaries has been between the officers, who did the planning and organizing, and the “private soldiers” or enlisted men who executed the plan. Historically, this has mirrored class differences in society. Officers have generally come from the nobility or other elite and land-owning classes, while enlisted soldiers have tended to come from the laboring (often rural) classes. This distinction began to be blurred with the advent of artillery and field engineering, when the nobility recognized that officership was beginning to require more than just “character” and breeding.

Officers have always depended on the oldest and most experienced private soldiers to train and form the younger and less-experienced soldiers; these more experienced soldiers eventually became known as “non-commissioned officers” in recognition of their leadership role. While all NCOs are subordinate to all officers in rank, younger officers will normally seek their judgment and advice. Senior enlisted personnel must maintain a delicate balance between showing proper respect for the

authority of young officers, and helping to educate and form those officers through the judicious application of advice and guidance.

The lowest-ranking private soldiers are those whose job it is to fire the rifles and throw the grenades. However, a number of these tasks require a good deal of technical know-how, and as militaries have become more reliant on machinery and electronics, more of the mundane activity of military personnel has become technical. Those with technical specialties which require a great deal of higher education are generally classed as officers (e.g. doctors, lawyers, engineers), while those whose specialties are more vocational tend to be enlisted (e.g. mechanics, electricians). Militaries have the option of outsourcing these technical needs to non-military personnel, of keeping those tasks within the military but having them done by technical specialists, or of keeping them in the military and having them done by generalists who will eventually move on to a different type of task. There is currently no research to show that one system is more efficient than another, but it would be worth studying.

Ranks

Within the larger role categories of officer and enlisted, individuals are further sub-divided by rank (see Appendix B for a list of military ranks in the countries involved in this study). Rank is not simply a function of seniority or of skill specialty; rank is intimately tied to the rest of the unit organization and usually associated closely

with particular jobs. The most basic units, the teams and squads, are made up of private soldiers ranking between E-1 and E-4. Platoons are commanded by an O-1 or O-2 (Second or First Lieutenant), assisted by a platoon sergeant, who is usually an E-7 (Sergeant First Class/Gunnery Sergeant). The headquarters element of each higher unit consists of the commanding officer (the CO), the executive officer (XO – for company through brigade), the senior non-commissioned officer (up to brigade), and the CO's staff (which is made up of officers, each of whom is responsible for an area such as personnel (S-1), intelligence (S-2), operations (S-3), and logistics (S-4)). The positions are similar at each level, but the rank of the people filling the positions will be different depending on what level unit is involved (see Table 3 Ranks).

In terms of authority, all officers outrank all enlisted personnel, no matter how junior the officer or how senior the enlisted person. The main purpose of rank is to serve as an organizing principle which allows rapid assessment of the authority structure under constantly changing circumstances (e.g. in battle where people are being killed), and which provides a relatively transparent framework for allocating jobs and pay.

Table 3: Ranks

Unit	Number of Soldiers	Ranks (commanding)
Fire Team	4-5	E-1-E-4
Squad	9-10	E-1-E-4 (E-5/E-6)
Platoon	18-44	(PL: O-1, PSGT: E-7)
Company	62-190	(CO: O-3, XO: O-2; CSGT: E-8)
Battalion	300-1 000	(CO: O-5, XO: O-4, BSGM E-9)
Brigade	3 000-5 000	(CO: O-6, XO: O-5, BSGM E-9)
Division	10 000-15 000	(O-8)
Corps	20 000-45 000	(O-9)
Army	50 000+	(O-9/O10)

Those who expect militaries to look very much alike on the workaday dimensions of personnel policy thus seem to have good reasons for it. There are many features of basic military organization which are nearly the same everywhere in the developed world. It is perhaps only reasonable to expect that these extremely similar organizations would administer their human resources in the same way.³

Yet differences certainly remain. Indeed, these differences are sometimes serious enough to cause friction in multi-national units (Gareis et al. 2003; Gareis and vom Hagen, 2004). Anecdotally, they are often attributed to “culture” or “tradition”. Sometimes they are treated as the result of a military not being oriented towards

³ Moskos et al. (1999) assert that one of the characteristics of post-Cold War militaries is or will be a blurring of all the distinctions I mention in the preceding sections. Whether or not this is an accurate prediction of the future, it is not yet the case with *any* military in the developed world that distinctions of service, rank, unit, or role have been abolished or even seriously atrophied. What “blurring” there has been is largely conceptual and only very rarely formal.

expeditionary missions.⁴ While there is most likely truth to the ideas that tradition and mission posture affect personnel policies, I argue that there are economic forces at work, too, stemming from both the mission of the organization and the economic infrastructure surrounding the organization. This chapter presents a theory explaining both similarity and variation in military personnel policies across developed western countries.

The specific argument made here is about the interaction of two economic logics. A military's basic function requires certain training and manning strategies, and these requirements interact with the preparation and employment expectations produced by the national market to create predictable patterns of similarity and variation.⁵ The paradigms for this argument are drawn from two literatures in political economy which are known under the rubrics of Human Capital and Varieties of Capitalism (VoC). Using the ideas derived from the literature on Human Capital, it is possible to determine what kinds of economic imperatives derive from military functional imperatives (e.g. a need for "firm-specific" training). The literature on Varieties of Capitalism then indicates

⁴ I am not speaking here primarily of the choice between volunteer or conscript models, but rather of the management of human resources. Cohen (1985) and others have pointed out how differences in factor endowment as well as mission posture might influence the choice between volunteer, conscript, militia, or other manpower models; I do not expect factor endowment to be a major explanatory variable for the kinds of policies with which this study is concerned.

⁵ I am not arguing that national economic type is prior to and independent of military organization – indeed, in many cases military needs have driven economic development (Dolman 2004). This is an argument about complementarities and mutual reinforcement, as explained in the following sections.

which economic imperatives derive from the national economic context. The interaction of these two produces predictions about where we are likely to see similarity and difference, as well as what kinds of differences we may expect to see. This is not a deterministic argument. I do not make the claim that personnel policies incongruent with the market structure are impossible. The implication of the economic literature is that incongruence will produce inefficiencies and will thus be avoided by rational actors if possible, but the concept of the functional imperative indicates that we may expect some inefficiencies.⁶

2.1 Underpinnings: Human Capital and Varieties of Capitalism

2.1.1 Human Capital

The literature on human capital deals primarily with how employers and employees reconcile their sometimes competing interests in skills training and employment. Gary Becker's seminal work (1975) on human capital distinguishes between "general training" on the one hand and "specific training" on the other. "General training" is that which is equally valuable to a large number of firms. Such training can be provided by public education because it increases the individual's

⁶ The possibility of avoiding behavior that leads to adverse consequences depends both on the ability to choose some other behavior and the knowledge that the behavior in question would produce bad consequences. I do not necessarily assume that any given country-actor will have this knowledge or ability, and therefore am also not arguing that they will always avoid the behaviors I label disadvantageous.

attractiveness to a large number of potential employers, giving the individual good odds of recouping his training investment, and thus the individual is willing to bear the cost of the training (in the form of taxes and time spent in education rather than earning).⁷ “Specific training” is that which is of most use to the employing firm and little or no use to other firms.⁸ The firm therefore has an interest in this “specific” training, but also fears the flexible labor market where its employees might leave the firm before the employer recoups its training investment. Employees in a flexible labor market, on the other hand, would be reluctant to fund specific training themselves for fear of being fired and thus losing their investments. The solution is for employers and employees to share the costs of specific training, and for employers to pay specifically-trained employees higher wages than those with only general training. By implication, it would be easier for employers and employees to agree to share these costs if the labor market were less flexible and turnover less likely.

The connection between training and tenure is relatively simple in Becker’s formulation: the more firm-specific training a firm wishes to do with its employees, the more job security it must offer them. This is in the interests of both parties: the employer

⁷ Becker also formulated the meaning of “general training” as that which raised the value of the worker by equal amounts in the training firm and in other firms (Becker 1975, 26). The examples he gave were of a machinist or a medical doctor. I consider these to be transferable or occupational skills rather than general skills.

⁸ Again, Becker also formulated it as training which “increases productivity more in firms providing [it]”. “Completely specific” training is that which has no effect on the worker’s value anywhere other than the training firm (Becker 1975, 26).

because he needs to retain the worker long enough to recoup the costs he invested in that worker's training (and because he cannot hire someone in a spot market who already has firm-specific skills), and the employee because if he loses his job his training provides him no value-added on the general marketplace, as it is not useful anywhere else. The more a firm relies on general skills, the less the firm will invest in the worker's acquisition of those skills and the less, therefore, the firm will feel the need to retain the worker because it has to recoup only the transaction costs of hiring the worker and because it can hire a replacement easily. The worker, by the same token, can command the same wage at another firm that requires general skills, and so has little incentive to stay.

Becker's definitions of general and specific training imply that all training programs can be placed along some continuum from perfectly general to perfectly specific, depending on the mix of perfectly general and perfectly specific *components* (Becker 1975, 30). Margaret Stevens (1994) has pointed out that there are training possibilities not covered by Becker's proposal. She argues that training programs might be such that they are worth equal amounts to only a small number of firms, or that they are worth varying amounts to many firms. She calls such training programs "transferable," giving that word a meaning distinct from "general" (see also Thelen 2004, 11ff.).

I will refer primarily to “skills” rather than “training” in this study, and it is important to explain the distinction here. Both Becker and Stevens use “training” as their unit of analysis, but assume that training consists of discrete components. Stevens sometimes appears to use the terms “skills” and “training” interchangeably, but I would argue that it makes more sense to think of skills as being the components of a training program.⁹ I use the same terms that Becker and Stevens use, but since the adjectives are being applied to a different unit (skills as opposed to training), the meaning is not exactly the same. I use the term “general” to refer to those skills which are useful to all firms more or less equally, and “specific” to refer to those skills which are useful only to the training firm. Following Stevens, I also use the concept of “transferable” skills as those which are useful to multiple but not all firms (or to many firms to varying degrees).

I do not, however, define these terms solely by the market demand for them, but also by the nature of the skill. For example, general skills are those which are useful to any employer by not being connected to a particular type of work but rather to capability writ large. These would include such skills as numeracy, literacy, decision-

⁹ It would be more useful to think of all skills on a continuum from more to less transferable, and scrap the ideas of perfectly general and perfectly specific altogether, but I retain the terms for the sake of ease of understanding.

making, analytical capacity, and responsibility.¹⁰ Specific skills are those which are connected to either a product or process which only the training firm does. These are such things as standard operating procedures or other issues relating to organizational culture, and can even include mechanical skills if they are related to machinery which only one firm uses or produces. Transferable skills, which I also sometimes call “occupational” or “vocational”, are those which relate to a certain occupation, and insofar as they meet the standards of that occupation, would be equally useful to any employer *whose business required that occupation*. They are not, however, useful to an employer who does not need that particular occupation. Examples include the skills of an auto mechanic, a medical specialist, or a clerical worker. Clearly, some of these “transferable” skills will be in higher demand than others, as the percentage of firms in the economy which need medical workers will probably be much lower than the percentage of firms which need clerical workers. We can think of occupational skills with wider applicability as “more transferable”.

The most pertinent lesson of this literature is that, depending on the kind of “product” a firm wishes to produce, it will have a need for a certain skill set in its employees. That skill set may be any combination of general, occupational, and specific

¹⁰ Sherwin Rosen has noted that the kinds of skills learned in a traditional liberal arts education generally enhance the individual’s ability to *learn*, and thus to become more productive at whatever job he or she has (Rosen 1972, 337).

skills, but the firm's stance on personnel selection, training, and job security will depend upon that skill set's composition.

2.1.2 Varieties of Capitalism

The basic premise of the VoC literature is that national market economic systems have tended to converge around sets of complementarities: mutually reinforcing practices, regulations, and structures. In essence, these systems comprise a number of cooperative "agreements" among sectors of the economy about how they will organize their activities. In the sense of a multiple-equilibrium game, it does not matter so much which equilibrium – which set of practices – the actors choose, so long as they all use the same one. Furthermore, the nature of the system as consisting of mutually reinforcing parts means that if any one part is replaced, the new part will not necessarily work if it does not complement the other structures and practices in that system. This is true regardless of whether the part is known to enhance efficiency in some other system.

As the phenomenon of globalization picked up speed following the end of the Cold War, speculation abounded that the need to compete on a global scale would force all companies to converge around a similar "best practice" model. National differences, it was believed, would fade to insignificance or be forcibly eradicated by the drive to win profits in the global market. Recent work in comparative political economy, however, has produced some compelling evidence that national differences in firm practice are more persistent than was expected. According to the VoC literature, there

are at least two ideal-types of market economies (called “Liberal” and “Coordinated” Market Economies), and they differ systematically in the way that they organize themselves in their attempts to solve the multiple coordination problems which firms face.

Firms must coordinate with a large range of other actors (potential and actual) – employees, other firms, investors, trade unions, clients, and so forth – and their survival and economic success depend largely on how well they are able to solve these coordination problems. Peter Hall and David Soskice identify five vital spheres in which firms will have to solve coordination problems: industrial relations, vocational training and education, corporate governance, inter-firm relations, and employees (Hall and Soskice 2001, 7). The two ideal-types of market economy are characterized by the different mechanisms they choose to resolve coordination problems in these spheres.

Another way to think about this argument is in terms of the various constraints or imperatives which operate on firms: there are those imposed by the nature of the function the firm is trying to fulfill (e.g. manufacturing or professional services), which require certain types of financing, certain types of workers with certain skills, certain decision-making structures, etc. in order to be successful. Then there are those imposed by the political, economic, and cultural environment, which tend to shape society’s institutions and thus make it easier or more difficult for a firm to meet the imperatives imposed by its function. To the extent that the environment constrains certain activities

too much, firms which depend on those activities will be selected out of existence in that economy. To the extent that it is possible, firms will adapt their practices to the environmental constraints in order to survive. This is one reason for the phenomenon of comparative advantage: some institutional infrastructures support activities which are important for certain kinds of firms, while others do not.

Systems in which firms “coordinate their activities primarily via hierarchies and competitive market arrangements” are called Liberal Market Economies (Hall and Soskice 2001, 8). These are the kinds of systems described in classical liberal economics, and they function largely on a basis of competition, supply and demand, and explicit contracting. Coordinated Market Economies, on the other hand, are systems where “firms depend more heavily on non-market relationships to coordinate their endeavors with other actors ... generally entail[ing] ... more reliance on collaborative, as opposed to competitive, relationships” (Hall and Soskice 2001, 8).

As indicated above, each of these systems relies on the support of certain institutions and organizations. Liberal Market Economies (LMEs) tend to have educational systems focused on producing general skills, robust external labor markets, and low job tenure (see also Becker 1975). They feature relatively few national cooperative or standardizing bodies. Coordinated Market Economies (CMEs), because they entail far more active coordination, require a more extensive set of institutions. Since the purpose of coordination is to achieve skills-output-employment equilibria with

higher yields than those which the pure market mechanism would support, the kinds of institutions necessary are those which reduce uncertainty and allow the formation of credible commitments. This includes standardized educational systems which produce high levels of occupationally-specific skills, high job protection, and somewhat weak external labor markets.

The clear implication of this argument is that one market type's attempt to use practices which do not "fit in" with the rest of the institutions ought to fail, and the research shows that this indeed happens with some frequency. The institutional infrastructure which supports practices of one kind does not support practices of another, and firms which attempt to coordinate using unusual mechanisms are likely to find themselves floundering (Finegold and Soskice 1988; Boyer 1997, 92; Hall and Soskice 2001, 26f.). In most cases, this trend is self-reinforcing, since the government will find it very difficult to introduce radical systemic change: it will be under pressure to produce policies which enhance the efficiency of the system as it is rather than to change the system entirely (Hall and Soskice 2001, 45ff.; Thelen 2004). There thus tends to be clustering of behaviors, skills, practices, expectations, and regulation, arising both from each firm's rational strategy of trying to maximize its own competence and efficiency given the playing field it is on, and from the government's attempts to encourage economic players to cooperate as well as possible for the sake of the economy. In short,

these systems are “sticky” and difficult to change except within the existing logic of the system.

Much of the literature on human capital (esp. Becker 1975; Stevens 1994) emphasizes the connections between education and skills training, compensation, and job tenure. These all have effects on firm productivity and efficiency, but their effects will differ depending on the nature of the firm’s activities. Knowing this, strategic actors will attempt to shape the education and skills profile of their workforces, the compensation schemes, and the levels of job security, to maximize efficiency at their particular tasks. Their attempts to shape these factors may be helped or hindered by institutions – most obviously those of the educational system, the labor representation and bargaining system, and the welfare system. The argument of Varieties of Capitalism is that these institutions are tied not only to the firm behavior which they regulate and influence, but also to one another. Thus, no firm is quite free to regulate its relationship with its employees as it sees fit; it must take what the educational system produces, and it must compete with other firms for skilled employees.

2.1.3 Alternative Arguments

The economic reasoning which is laid out in the preceding sections is by no means the only factor influencing the shape of military personnel policies. This section presents some other factors, which may turn out to be more important than the economic logic.

2.1.3.1 Functional Similarity

Militaries are subject to some very strong homogenizing influences, as has already been mentioned. The most obvious one is functional: in general, militaries are structured to allow the organized application of physical violence, meaning they are inevitably tied to needs for healthy, fit (and usually young) people, for people capable of working together in teams, reacting to complex situations with sub-optimal information, operating complex machinery, and keeping calm in conditions of extreme stress and danger,¹¹ and for all of the logistical support associated with a force-in-being, including people to administer, arm, feed, equip, maintain, medicate, and transport the fighting arms. In short, militaries need people skilled in a wide range of occupations, including many that are found in the civilian world, but also many that are not.

The high need for organization and cooperation tends to require hierarchy, which implies a somewhat pyramidal rank-personnel structure for efficiency reasons. It has generally been assumed that militaries also require a high degree of internal equity, meaning that service-members should feel like they are all equal contributors to the

¹¹ These requirements have remained remarkably stable despite widespread American expectations that technology could replace humans in war. The era of computer game warfare is not yet here. See esp. Biddle 2004.

mission regardless of what their particular task is. This distances compensation, in particular, from the market forces present outside the military.¹²

A less obvious but still important influence is the transnational nature of the military profession. Militaries generally exist to interact with other similar organizations.¹³ Far more than most other professionals, military personnel *must* learn from their counterparts in other countries because they must often either cooperate or compete with them. It is not at all unusual, therefore, for officers and enlisted to read about the tactics, strategy, and organizational philosophy of militaries from other cultures and traditions. Much of this is done in the hopes of discovering weaknesses to exploit, but also with the intent to imitate success.

All of this being the case, one might argue that the similarities and interaction will outweigh any differences across countries and push advanced militaries toward

¹² Baker, Gibbs, and Holmstrom (1994, 904) note that wages in firms, even those with strong evidence for internal labor markets, are not in fact specifically attached to jobs or rank levels, although rank levels are important for wages. This is probably because theory requires that, for promotion to be a decent incentive, pay needs to increase at an increasing rate as rank goes up (ibid. 905). In the military, pay generally *is* attached to rank and has nothing to do with occupational specialty (except for certain exceptional MOSs which get bonus or specialty pay), and thus promotion is both the military's main retention incentive *and* a difficult incentive to maintain because of the exorbitant costs the theory indicates it would require. One avenue for research might be to examine whether all militaries attach pay to rank only and what the potential effects of different practices might be. The authors also note that "Surprisingly, the fastest promotees [in a firm] also exit more often. This would seem to be the opposite of what the firm would want and suggests that constraints imposed by the pay administration system may lead these people to quit ... administrative constraints may keep the firm from giving the best performers raises large enough to retain them" (916). Arguably, this is precisely the military's problem, and raises the question of whether militaries are even in a position to offer payment large enough to retain the best people, or if they ought to rely on other forms of incentive.

¹³ They must also, of course, interact with dissimilar organizations; this does not detract from the point.

convergence. This would lead to all militaries in developed western states having essentially similar military personnel policies and human resource strategies, regardless of the differences in market economic type.

2.1.3.2 National Idiosyncrasy

As mentioned above, another potential explanation for personnel policies has to do with national traditions or culture. This sort of explanation has never been explicitly advanced in a comparative study of military organization, but is often implied by the work of such authors as Elizabeth Kier, Thomas Berger, and Peter Katzenstein. Their work has argued, often very convincingly, that cultural norms – both national and organizational – play an important role in forming military doctrine and practice. It is both possible and reasonable to conjecture that culture will also affect the way that individuals are assigned to and moved through the structures outlined above. Such an explanation implies some path-dependency because of its historical nature. In that sense, it indicates that no two militaries should look exactly alike, because social and bureaucratic traditions cannot be expected to evolve along identical lines. This sort of argument would lead one to expect that there should be no discernible pattern in the military human resources strategies of different countries. Some may be similar, and some different, but their similarities and differences ought to be essentially random.

2.1.3.3 Socio-economic Legacy

Another possibility is that the similar socio-historical development of militaries in the western democracies will lead to a particular type of similarity across all of them. Since officers have generally come from the class of gentlemen and property owners, their service might be expected to be on a basis of honor and character rather than occupational skills. Enlisted personnel, on the other hand, have come from the class of manual laborers and clerical workers, and might be expected to be treated somewhat differently. This argument would lead us to expect that policies for officers ought to look the same across countries, and policies for enlisted personnel ought to look the same across countries, but policies for officers and enlisted ought to differ markedly.

2.1.3.4 Mission Posture

Anthony Forster (2006) has argued that European militaries can be classed into four different ideal-types based on their mission orientation, which in turn arises from threat perception (67). These types are Expeditionary Warfare (specifically high-intensity operations), Territorial Defense (not excluding international missions, but focused more on border integrity), Late Modern (not excluding territorial defense, but focused more on low-intensity international missions), and Post-Neutral (focused on “protecting the national integrity of the state”).

Forster’s main dependent variables are recruiting methods and standards, personnel difficulties (recruiting and retention success), promotion standards, and

command and control structures. While I take issue with certain aspects of Forster's argument,¹⁴ he is strongest on the point that mission posture is a significant factor in whether or not conscription is an attractive policy. Although conscription is not one of the dependent variables in this study, it is a manpower issue, and thus indicative of the possible relevance of mission posture to other manning issues. This argument would lead us to expect that the major differences in policy should appear between those countries with an expeditionary mission posture and those without.

2.1.4 Summary

While Becker and the other authors of the human capital literature specifically reference the military, the literature on comparative economics has largely ignored them, assuming that militaries function differently from firms. It is therefore not immediately obvious that the Varieties of Capitalism argument ought to apply. Military personnel policies might be expected to be very similar to one another across countries due to functional necessity. They might on the other hand be expected to differ according to mission posture, or based on national traditions and cultural characteristics.

¹⁴ The typology itself is somewhat weakly differentiated. I would challenge particularly the Post-Neutral category, since Ireland falls better into the Late Modern group and both Austria and Switzerland are sufficiently covered by the Territorial Defense definition. Forster does not explain convincingly how "protecting national integrity" is significantly different from what any of the other states is doing. His typology also produces surprisingly little variance on the dependent variables. Both Expeditionary Warfare types and Late Modern types are expected to have significant difficulties with recruiting *and* retention. The Territorial Defence group is so diverse that prediction of any kind is difficult, and Forster's predictions about it seem to be most appropriate for the post-Communist states of Eastern Europe rather than all states focused on territorial defense.

I argue that the interaction of two economic logics will be the most significant factor driving military personnel policies. That logic can help explain both how military functional imperatives produce cross-national similarities, and how militaries may be expected to vary with economic type. Divergence from the market norm may be used to predict specific difficulties (or perhaps advantages) the military will experience as a result of being “off-equilibrium”.

My argument does not dismiss the significance of culture. The economic literature is just beginning to address the question of how different market types emerge and coalesce, and it stands to reason that the system of complementarities encompasses more than merely economic phenomena (see e.g. Esping-Andersen 1990; Esping-Andersen 1996; Gourevitch and Shinn 2005; Iversen and Soskice 2006). Curtis Gilroy and Cindy Williams, in the conclusion to their edited volume (2007) argue that all militaries can learn from one another, but that solutions may not work the same way – or indeed at all – in every country. They note that this may be “for a variety of reasons, including cultural differences or historical precedent”. Their point is well-taken, and this study is a rough attempt to understand one major factor – economic structure – affecting which reforms might be useful to a given country. In other words, economic structure is probably conditioned by cultural variables. The utility of this study lies not in its substitution of economic logic for cultural logic, but in its use of precisely specified economic mechanisms to explain particular individual policies.

2.2 Influences on Military Organizations: Functional Pressure and Complementarities

2.2.1 Functional Pressures: Skills, Training, and Tenure

The literature on human capital focuses primarily on explaining how the individual's economic interests interact with the firm's economic goals and interests to produce equilibrium strategies for employer-employee interaction. I use this logic to deduce what if any employer-employee dynamics derive from a military's attempts to pursue its unique functional goals.

Becker (1975) notes that the military occupies a peculiar position in the economy. It trains personnel not only in military (specific) skills, but also in a number of occupational (transferable) skills. He argues that this is the reason why militaries have no difficulty enlisting personnel, but great difficulty retaining them after the first enlistment (Becker 1975, 24f.). He points out that military wages during the first enlistment are generally higher than could be expected on the labor market because the military bears most of the training costs – both general and specific, but that wages in subsequent enlistments, i.e. for *trained* personnel, are low relative to what those individuals could expect to obtain on the market.

Becker's argument still holds true more than twenty-five years later, but there is a major caveat: he was looking at the military only in the context of a Liberal Market Economy. One prominent feature of pay-scales in Continental Coordinated Market

Economies is their compression, while Liberal Market Economies tend to feature wide variance in pay scales. Because the wage differential available in LMEs will be much larger than that in CCMEs, we may expect that militaries will have increasing difficulty retaining high-demand skilled workers in LMEs as Becker predicted, but less difficulty doing so in CCMEs. The higher flexibility of the labor market and lower switching costs in an LME would make it economically speaking less worthwhile for the military to invest in either transferable or specific skills training unless they could conclude binding contracts. The opposite situation holds in CCMEs: it is very worthwhile to invest in such training, but contracts must limit the employee's tenure rather than bind him in, because he is likely to want to stay for longer than the military can use him.

Speaking in purely economic terms and following the literature on human capital, militaries would prefer to hire workers who already have both general skills and specific technical skills, and restrict their training expenditures to "firm-specific" issues. However, the component of "firm-specific" skills required for individuals in the military is comparatively large, and the number of lifetime contracts ranges from extremely small to none. All else being equal, and absent job security, no skilled or unskilled individual would choose to join the military and invest in developing a large repertoire of potentially useless skills unless he or she had no better labor market options. This is of course the fear of many critics of all-volunteer armed forces: that the hardship of

military life and the bad prospects for later work will cause only the private sector rejects to enlist.

There are however a number of other factors which affect the calculus of whether to serve in the military or not. First, even very specific military training often parlays into increased general human capital, and work experience in the military also builds many desirable general skills. This is always worth something on the labor market, but will be worth far more in an LME than in a CCME, indicating that military service ought to be more attractive in the former than the latter.

Second, there may be intangible costs and benefits to military service. These can include both issues external to the individual, such as the reputation of military service – whether it is widely seen as a good and respectable occupation or not – and internal issues of whether the young person needs to prove something to or challenge him/herself. These clearly are not likely to vary by economic type but rather with other factors such as national historical experience with the military.

Third, it is not unusual for young people to be uncertain about what they want to do with their lives; the military is a way to get work and life experience on a decent income. This is of course a less attractive possibility in situations where the military has a bad reputation or where military life is associated with a great deal of hardship. All else being equal, this will be a far more salient option in LMEs, where work trajectories

are less rigid and early exploration is less likely to be detrimental to the individual's future earning potential.

Fourth, there is the cost and availability of occupational skills training and/or higher education versus the benefits on the labor market. Where education and training are high-cost or rare and valuable, the disadvantages of military service may be outweighed by the benefit of training and/or education. Where education and training are low-cost or widely available and valuable, the military's offer will be less attractive, but that may fluctuate with the availability of training and education opportunities on the civilian side. Where training is low cost and less valuable on the labor market, chances are that military training might be attractive as being more reliable and practically-oriented than school-based schemes, and thus on balance more desirable, but other factors are likely to play a larger role in the individual decision to join. In short, it is too pessimistic and too undifferentiated to claim that only those who cannot find work in the private sector will join the military. Depending upon their context, militaries often have several economic and other factors in their favor.

The specific calculus of recruiting in different national contexts is beyond the scope of this project. The immediate point is that the military's ability to offer access to higher education may be a more important recruiting tool in an LME than in a CCME, but its ability to offer *certified* occupational skills training will definitely be more important in CCMEs than in LMEs. This is partly because the general skills benefit of

military service is lower in CCMEs, and thus cannot do as much of the cost-benefit balancing as it does in LMEs. It is also partly because militaries are a potential source of high-value special skills training in a context of relative scarcity. In order to capitalize on this attraction, militaries must ensure that their training is equivalent to or better than the civilian counterpart, and *recognized* as such. Young people in a CCME will not enter employment unless they know that they will be acquiring a skill that they want and consider useful. By the same token, militaries in CCMEs can benefit from an existing infrastructure of standardized vocational training schemes, curricula, and standards, which they can rely upon to reduce their own training costs.

2.2.2 Complementarities: Education, Labor Markets, and Job Security

My theory is based on two simple observations. The first, as already mentioned in the context of the VoC literature, is the mutually reinforcing nature of elements within economic systems and the obvious disadvantages invited by off-equilibrium behavior. The second is that militaries are tied into national labor markets. This is especially true of all-volunteer militaries, but is also true for those in which the role of conscription has been reduced to the point where conscripts make up a small percentage of the force and individuals have significant levels of choice over whether or not they serve.

The first and most obvious connection is the fact that militaries must recruit from the same pool of people as all other firms and agencies, and furthermore that modern militaries often want the same people that the firms do: intelligent, creative, and

technically skilled. Somewhat less obvious, but just as important, is the fact that the vast majority of military personnel will also have to re-enter the labor market after their military service. While this may be more or less true of other firms, the military has a unique disadvantage in this area in that a significant proportion of the skills it must inculcate in its employees are largely useless in any other work setting. In other words, unlike the presumably small set of firm-specific skills which are wasted when an individual moves between firms within a sector, the individual moving from the military to a civilian job is likely to have a large set of skills for which he cannot expect any kind of compensation from the civilian firm. This creates problems at both the recruiting and retention stages, but the nature and severity of those problems are likely to differ depending on the flexibility of the labor market and the importance of occupational versus general skills.

A third connection is that nearly every job one might have in the civilian world has a counterpart in the military organization, only with the added characteristics of specifically military skills, hardship, danger, and high levels of regimentation. This means not only that militaries must compete with nearly every sector in the civilian economy, but that they must do so while maintaining internal integrity and equity toward their employees.

Given the military's multiple points of contact with the civilian labor market, the VoC argument indicates that we should find either complementary structures within the

military, or – where military functional necessity requires non-complementary structures – we may expect difficulties for the organization. The brief discussion above indicates that some of the most important aspects of military human resources management are likely to be affected by the structure of the civilian labor market. These aspects include how the military selects people in, how it assigns them a function, and how it moves them through or out of the organization.

In looking for the most relevant aspects of labor market structure, it is helpful to return to Hall and Soskice's (2001) list of spheres where coordination is necessary: industrial relations, vocational training and education, corporate governance, inter-firm relations, and employees. Corporate governance and inter-firm relations are not really relevant to a study of the military, as there is no question of stocks, loans, financing, or interaction with other similar firms.¹⁵ The question of industrial relations is potentially very relevant, but will not form a central issue for this study as it would have involved analyzing another entire set of institutions (representative bodies) as well as the militaries themselves. The spheres of vocational training and education, and of how employees are handled, seem most relevant to an explanation of military personnel policies. The following sections detail how I expect the educational and vocational training system, the significance and certification of employee skills on the labor market,

¹⁵ The rise of Private Military Companies will make inter-firm relations a more interesting area for study in the near future.

the normal contracting practice, and the level of job protection to affect military policies on selection and accessions, occupational specialty assignment, and separations.

2.2.3 Hypotheses for Three Policy Areas

2.2.3.1 Selection and Accessions Policy

The way that an organization selects and accesses its personnel is a fundamentally important part of its overall human resources strategy. It is even more important for organizations which cannot rely heavily on external labor markets for high positions (Asch and Warner 2001). In general, militaries are such organizations.¹⁶ The main concerns are how to gather information about potential employees' suitability for work, how to categorize the work to be done and the people who will do it, and how to organize their entry into appropriate career paths.

Selection processes are designed to provide job-relevant information to both the employer and potential employee. The importance of the selection process depends to some extent on how permanent the effects of the outcome are: in contexts where "bad" decisions can be easily rectified once more reliable information exists (e.g. in LMEs), the selection process need not represent a huge investment. Where it is difficult or impossible to fire an employee who turns out to have been a bad choice, the selection process becomes a far more important tool for personnel management (e.g. in CCMEs).

¹⁶ The debate over whether widespread opportunity for lateral entry is a viable personnel option for militaries is still completely unresolved (see e.g. Williams 2004).

As will become clear below, however, LME militaries have much more difficulty firing employees than do LME firms, and thus it is reasonable to expect LME militaries' investments in the selection process to be much closer to those of CCME militaries than would be the case in the private sector. In short, we should expect militaries' selection processes to be approximately equally difficult and complex in LMEs and in CCMEs, but if there is any divergence, the LME procedure should be less intensive.

The connection between educational systems and labor market entry and career paths is well-documented (Allmendinger 1989; Kerckhoff 1995; Hinz 1999). Kerckhoff (1995, 343) hypothesized that internal labor markets would be more important in societies which relied more upon general skills than on occupational skills. Others (e.g. Crouch and Streeck 1997, 2) have stated that CCMEs (which rely on occupational skills) are more likely than LMEs (general skills) to feature internal labor markets because of the difficulty of firing workers in CCMEs and the need to guarantee long tenure in order to induce workers to invest their time in specific skills training. It is clear from the empirical literature that Crouch and Streeck are correct: CCMEs are far more likely to feature strong internal labor markets than are LMEs.

In the context of this study, the question is what expectation to have about military organizations and the existence of internal labor markets there. The logic of an internal market consists of a few components: first, the company's promise to give employees privileged consideration for higher positions and/or pay encourages

employees to develop firm-specific skills and knowledge, which in turn benefit the firm's productivity. Second, the company's promised loyalty to the employee may encourage the employee to do better work and to enjoy a higher quality of life. Third, the company can reap all the benefits of investments in transferable skills by using the likelihood of promotion as an incentive to keep the employee long enough to earn back the costs of his or her training.

External labor markets, on the other hand, are believed to enhance the efficiency of the labor market as a whole system. If an employer can always hire from the entire pool of potentially qualified people rather than having to give priority to those already employed by him, in theory at least the chances of finding the best person for the job increase. Employees also have an incentive to work hard and improve themselves in order to improve their position on the general labor market. If they do not, they can be fired and their chances of finding another equally good job are not very good.

It is clear why LMEs, organized as they are around competition, ought to favor external markets, while CCMEs are both interested in and capable of sustaining internal labor markets. If we recall, however, that militaries in both contexts must invest heavily in employee training in both firm-specific and transferable skills, we realize that in LMEs the military ought to be more likely than the general economy to rely on an internal labor market. Spot markets are simply not efficient for the military as long as the assumption holds that all military personnel must have basic military skills and an

understanding of the organization. This of course leads us to expect that militaries in CCMEs also ought to rely on internal markets, at least to the extent that the above assumption about the need for basic military skills and experience holds true. It is possible that a military which is more technically oriented and less focused on uniquely military functions (such as combat) might be open to lateral entry. The implications of all of this for accessions are that militaries in both types of economy should prefer to have the lowest feasible number of tracks and entry points. If they do not, it is because the assumption that military skills are important for all service-members, has been relaxed.

Main Hypotheses:

What information is available to the employer in a selection process, and what information the employer chooses to seek, both depend upon the educational and wider employment context: employers cannot very well ask for certifications which do not exist. It is not my intention in the following sections to make any causal claims about which came first: educational system or market type; it is sufficient to note that educational system and market type reinforce one another and tend to correlate (see e.g. Becker 1975 on LMEs; van Wieringen 1999, 216). Educational systems in Liberal Market Economies tend to be oriented towards general skills and often feature low or moderate

standardization in terms of both quality and content.¹⁷ Education and training for specific occupations normally takes place either on the job or in post-secondary technical colleges. Educational or skills certification is often a flexible or even optional criterion for hiring, at least in part because low standardization means that certification does not always convey much information to an employer. Many employers in Liberal Market Economies are more interested in an individual's job experience and record of past reliability and job performance than in the person's official schooling. The most recent experience generally counts most: once a person has held a job, subsequent employers will not normally be interested in the person's previous schooling (beyond requirements for certain degree-levels such as high school or Bachelor's).

Education in Coordinated Market Economies, on the other hand, generally introduces specific vocational training early, and offers general skills "academic" training only to that subset of young people who are expected to attend university. The majority of the school-age population is likely to be located in vocational training programs at the secondary school level. These training and educational programs, moreover, tend to be highly standardized, so that certification carries a clear meaning to the employer. Probably for this reason, certification is a far more important criterion for employment in most CCMEs. Because the training is specific and vocational, moreover,

¹⁷ Following Jutta Allmendinger (1989), I define standardization as "the degree to which the quality of education meets the same standards nationwide." I determine this specifically through the existence of national curriculum-setting bodies and national examination standards.

it is indispensable to show certification in the particular skill in which the individual is seeking employment. The employer will expect his new employee to be adept at his job essentially from day one, barring a certain amount of on-the-job learning about firm-specific procedures and requirements. Employers in CCMEs are always interested in an individual's schooling and certification, no matter how long the individual has been in the workforce or how much relevant experience he has.

Human capital theory does not imply anything in particular about what selection criteria firms ought to use, so we can expect the environmental factors to be influential. The facts mentioned above lead us to expect certain things from the selection criteria in LMEs and CCMEs, respectively.

Liberal Market Economy militaries ought to be willing to overlook the lack of an otherwise required educational certificate under mitigating circumstances. Options such as waivers ought to exist. Militaries in CCMEs ought to regard lack of the proper certification an automatic ground for rejection of the application.

SA1: Educational certification should be a less flexible selection criterion in the selection process for CCME militaries than for LME militaries.

I indicated above that the training and contracting requirements of a military mean that the general rigor of the selection process ought to be approximately equal in LMEs and CCMEs; this means that if LMEs can be less rigorous on the educational certification question, they must have some substitute measure. I hypothesize that they

would use aptitude testing as a convenient proxy for ability to learn new skills and to function in an employment situation. This does not mean that CCME militaries will not use aptitude testing, but rather that I expect their use of aptitude testing to be used purely for determining where a person ought to be assigned within the military rather than whether he or she may serve in the military at all.

SA2: LME militaries ought to feature aptitude testing to substitute for the lower salience of educational certification, while CCME militaries should not need aptitude testing (except as it relates to occupational specialty assignment).

Also related to the educational system are the entry points to the labor market. Continental Coordinated Market Economies tend to have more highly stratified school systems than do Liberal Market Economies.¹⁸ Likewise, career tracks in CCMEs are quite well-defined, and points of entry into those tracks tend to be kept separate. Militaries in CCMEs should exhibit more career tracks than those in LMEs, and those tracks should be relatively impermeable except in combination with specific, universally recognized forms of certification (i.e. not internal to the organization). I define military career tracks

¹⁸ Again following Allmendinger (1989), but this time somewhat more loosely (“the proportion of an age cohort that attains the maximum number of school years provided by the educational system and ... the degree of differentiation within given educational levels (i.e. tracking)” (Allmendinger 1989, 233)), I define high stratification as a system with relatively even distribution of school-age youth across major secondary school leaving certificate options, early decision points (i.e. a system where the “track” one is on must be chosen at least two years before the certificate is to be achieved), and more than two major, common leaving certificate options. Low stratification is a system with skewed distribution (i.e. most school-aged youth do one leaving certificate, even if others are available), late decision points (i.e. a person may choose a particular type of leaving certificate within two years of the projected date of completion), and/or two or fewer available tracks.

as sequences of ranks which flow directly up into one another through normal promotion, with a point of external access at the bottom (among other possible points of access at higher ranks), a definite final rank which can be transcended only by some process of transfer other than simple promotion, and some definite role (e.g. technical, leadership, etc.). I will sometimes refer to “mini-tracks” below, which tend to have a definite role and often a rank cap, but which usually do not have an external access point at the bottom (i.e. they draw primarily or exclusively from military personnel). Examples of mini-tracks are Warrant Officers in the US military and technical officers in the Irish military.

I noted above that all modern militaries are divided up by “roles” and mentioned officers and enlisted. Both of these constitute “tracks”, and therefore the minimum number of tracks for any military is two, regardless of how undifferentiated the educational system is. It is, however, possible to divide the roles up into multiple career tracks and Hypothesis SA3 states that these will be roughly predicted by the tracks found in the secondary level of schooling in a given country.

SA3: The number of points of access to the military and tracks within the military will correspond roughly to the number of tracks in the school system.

In CCMEs, the tasks in the economy tend to be conceptualized as belonging to different categories, and movement between the categories, e.g. from laborer to upper management, is not the normal employment path. In LMEs, on the other hand,

employment categories tend to be much more permeable – at least in theory. The way that one moves up the “food chain” in a CCME is to achieve the higher educational certification; the mode in an LME is usually to get job experience (although higher educational certification also helps). Thus, this hypothesis predicts that movement between categories or tracks in a CCME military will be possible only if the soldier has achieved the normal educational certification which would be required for him to move from one category to another in *any* employment situation, while soldiers in LME militaries ought to get some kind of advantage or break simply by virtue of their military experience.

SA4: The more highly stratified an educational system, the more difficult it will be to move from one track to another within the military, without achieving the necessary civilian certification.

The use of bonuses for both recruiting and retention has been effective in the American context (see e.g. Hosek and Peterson 1985), but may also be considered a peculiarly LME approach to personnel management. Although the *effects* of bonuses ought not to differ from one market type to the next, the military’s *ability to use* bonuses may do so.

SA5: LMEs will be more likely than CCMEs to have flexible monies available for enlistment and re-enlistment bonuses.

Alternative Hypotheses:

It is possible that the military occupies a unique space in the economy which is not fully analogous to the firm. Its structure and organization may be governed by national security concerns, by outdated industrial-era logic, or by bureaucratic accretion. In any of these cases, we would see the following:

SA6: Selection and accessions will be very similar in the United States and the United Kingdom, which have similar mission orientations; they will also look very similar in Ireland, the Netherlands, and Germany, whose mission profiles differ from the USA and UK, and are similar to one another.

SA7: There will be no patterns whatsoever in number of tracks, number of points of entry, or permeability, as selection and accessions will be determined by path-dependent, idiosyncratic, national bureaucratic accretion.

These hypotheses are tested in Chapter 3.

2.2.3.2 Occupational Specialty Assignment Policy

The way that training takes place relates directly to the way that young people are fed into the work force (Allmendinger 1989; Lynch 1994; Lange 1998). The Varieties of Capitalism literature describes Continental Coordinated Market Economies as highly dependent on specific occupational skills training and certification, whereas Liberal Market Economies are said to rely more on general skills and on-the-job training or

“learning by doing” (see e.g. Lynch 1994; Shavit and Müller 1998; Soskice 1999, 110).¹⁹ Such economies generally have compressed wage scales, which is one of the institutions encouraging and enabling widespread firm-based vocational training (Thelen 2004, 15, and see above). Continental Coordinated Market Economies also tend to have less flexible labor contracts, with more job protection, making occupational and firm-specific skills and thus apprenticeship-type arrangements more attractive for both employers and employees (Culpepper 1999; Wagner 1999; Soskice 1999, 106-107; Thelen 2004).²⁰

In Liberal Market Economies, poaching is easy due to flexible contracts which give neither employer nor employee much security. This in turn makes firms less inclined to invest a lot of time and effort in training employees in occupational skills. They prefer instead to stick to firm-specific training, despite the risk of losing their investment. Most formal occupational training takes place in the normal school system, both secondary and post-secondary (Soskice 1999, 110), but there is far less vocational training than in CCME school systems.

¹⁹ Shavit and Müller (1998) call countries like Germany and the Netherlands “credentialist” to indicate that they feature standard and known connections between types of education at the secondary AND tertiary level and types of occupation.

²⁰ It should be noted, however, that the Netherlands has somewhat less job protection than Germany, due to the greater percentage of very small businesses in its economy. The small size of many firms leads to a much less powerful role for works councils, and thus a more employer-directed system of firing. This is mitigated however by the requirement for employers to go through the Central Organization for Work and Income (CWI) in order to fire any employee. Individuals who are fired due to structural reasons (i.e. those who are made redundant) can generally expect very generous welfare benefits. Firing for either redundancy or performance reasons is still far more difficult in CCMEs than in LMEs.

Militaries have a high need for their employees to develop “firm-specific” or non-transferable skills. In addition to his or her “trade”, a soldier must also have soldiering skills, unique to the military. Even in the largest militaries, which can afford high levels of individual task specialization, it is still possible that a lawyer may have to deploy to an operations zone, that a cook or a driver will have to work under conditions of hardship and danger, and that a finance officer will have to take over an operational job because of a shortage of other personnel. Thus militaries assume that they will have to spend a good amount of time and money training their personnel in firm-specific skills, which add little value for a post-military career. Military training, however, also adds to an individual’s general and occupational skills, and indeed militaries advertise this as an incentive to join. An example of this is the claim made by many militaries that service will develop the individual’s self-discipline, responsibility, and maturity.

Furthermore, militaries must be concerned with how their former members re-enter society, both as a general interest in social peace and order, and as a specific reputational issue for recruiting. In LME settings, soldiers who have learned specific vocational skills may have a significant advantage on the labor market, while those with only general skills will not generally be at a disadvantage. In CCME settings, on the other hand, occupational skills training is just barely enough to make an individual acceptable on the labor market. Continuous practice is also key. Anyone who did *not* have such training would be almost unemployable except in the low-skill dead-end

sector. This is particularly a problem because those people who have the highest incentive to stay in the military are those with the most firm-specific skills, i.e. those in the combat arms, but militaries do not need large proportions of them to stay. Militaries must therefore think about the training they offer not only in terms of what is immediately useful for the organization, but what is necessary to equip those leaving the organization with the ability to survive in society.

This discussion indicates a number of things about how militaries need to structure their training and contracts: first, they will have to offer contracts which give the individual sufficient control over the portfolio of occupational skills he is likely to acquire, such that he does not feel his career satisfaction or future job prospects to be threatened.²¹ What counts as “sufficient control” is likely to differ depending on the economic context. In an LME, the individual will need less control than in a CCME. Second, they will have to offer enough transferable-skills training that the person is also willing to invest in firm-specific skills because he or she is assured of improving his or her position on the civilian labor market upon exit from the military organization. Again, this is likely to be different in LME versus CCME contexts: in LMEs, occupational training will be valuable but not indispensable, because general skills training and job

²¹ Van der Linden and van der Velden show that, in the Netherlands, a person whose first employment experience is in a field outside of that for which he or she was trained has a much higher probability of being “stuck” in fields unrelated to his/her training, and also of having somewhat lower earning power than those who found employment appropriate to their education-level and field (van der Linden and van der Velden 1998, esp. 118).

experience are valuable on the job market. In CCMEs on the other hand, occupational training will be the individual's primary ticket to post-military employment. Third, they will have to offer enough job security that the person is willing to invest in the firm-specific skills at all (Soskice 1999, 115). The first two of these issues will be addressed in this section, the third in the following section on Terms of Contract and Separations.

Main Hypotheses:

If occupational skills are far more important to the individual in a CCME than in an LME, then we should expect potential recruits in a CCME to demand more control over their specialty assignments. They should also be less willing to join unless "joining" constitutes a particular job rather than a general service obligation. Potential recruits in LMEs are likely to have weaker preferences about their occupational specialties, and ought to be interested in having control over their assignments, but far more flexible about it. Occupational guarantees should be relatively less important in LMEs, but could still be useful as recruiting incentives, and ought to be used when recruiting becomes difficult.

OS1: CCME militaries are more likely to feature a contracting process which allows the applicant to choose his occupational specialty before committing to the organization, while LME militaries are more likely to have a flexible, market-based approach to specialty assignment.

As explained above, the significance of an occupational designation within the military will depend in part on the training and maintenance of the skills involved: if the

skills are equivalent to those in the civilian sector, then the military experience will be high value. Should the military's occupational skills training be highly idiosyncratic and unrecognized by civilian authorities, then in terms of bargaining power for the worker it holds little or no value-added. If no civilian employer will acknowledge his skills and training, then the skills and training are useless. Therefore, if CCME employers rely heavily on certification, then CCME militaries will have a strong incentive to ensure that their training is recognized and certified by the same bodies that recognize and certify all training. Since certification and occupational skills are less important in an LME (although always an asset), we may expect recruits in LMEs to be interested in a much wider range of benefits from Army service, including but not limited to occupational training. This dilutes its importance and makes the military less interested in expending resources to ensure a tight fit with civilian schemes in LMEs. This does not mean they will not invest at all – they do have *some* incentive in the sense that it is always a recruiting bonus to offer such added value, and if certification in the civilian realm is standardized then civilian training curricula will present a salient option for the military to use.

Furthermore, as was briefly mentioned above, advancement to a higher track in the military in less permeable situations will require more than just military experience and skills. Thus, if the military in a CCME wishes to be able to offer a plausible story of career advancement, it must also provide the individual with the means to advance to a

higher track, i.e. recognized certification. This is not as much of a concern in LMEs, since there are fewer tracks and fewer points where such extra-military credentials are necessary, and the tracks should be more permeable.

Military efforts to coordinate training with civilian certification schemes will depend primarily on how important such efforts are perceived to be for recruiting (low in LMEs and high in CCMEs), and secondarily on an expectation of how costly and successful harmonization would be (based on level of standardization). Since standardization is almost uniformly high in CCMEs, it is simple to predict a high level of effort to harmonize in those countries. Standardization varies in LMEs, therefore I expect low interest to combine with low standardization to yield low effort, and low interest to combine with moderate or moderate-high standardization to yield moderate effort. Low effort is defined as taking some action to harmonize training and credentialing, and offering detailed records and information which are easy for a civilian employer to interpret (e.g. with rough civilian equivalents to military training); moderate effort is working actively with various credentialing agencies in order to get most occupational training recognized and certified; and high effort is attempting full integration of the military and civilian training schemes. The military's actual success in harmonizing its training with civilian schemes will be a function of the effort and the standardization (i.e. ease). Additional evidence in support of the hypotheses' logic would be if recruiting

and informational emphases were concentrated on the aspect of occupational training in CCMEs, but not as much in LMEs.

OS2: CCME militaries, in a context of high certification standardization and high skills importance, will exhibit a high level of effort to coordinate their training and education with civilian schemes.

OS2a: LME militaries, in a context of low to moderate-high certification standardization and low skills importance, will exhibit low to moderate effort to coordinate (varying with the level of standardization).

A final point regarding training is that CCME militaries would have serious difficulty recruiting into combat arms branches (where one learns very few transferable skills) if they did not guarantee some kind of training that will be useful to the individual upon his or her separation from service. Militaries in LMEs, although they offer less choice to the individual, will not be under the same pressure to provide training to all personnel. While it is important for LME militaries to make training available for personal development and self-improvement, they are not expected to equip all service-members with occupational skills, because not all service-members may be interested in developing such skills. It can be taken almost for granted that individuals in CCME militaries will have a strong interest in developing occupational skills.

OS3: CCME militaries will offer occupational skills training to all military personnel with at least a medium-term contract; LME militaries will provide occupational skills training only to those personnel expected to carry out such occupations within the military and otherwise on a competitive basis.

Alternative Hypotheses:

One possible alternative hypothesis is that the historical development of the division of military roles, which was similar in all European and Western countries during the eighteenth and nineteenth centuries, would cause officer and enlisted assignments to differ, regardless of economic context. Such an argument might point to the historical difference between aristocratic officers and labor-class enlisted men, and predict that enlisted personnel will receive very specific contracts for an occupational function, while officers will receive rather less specific contracts. Despite the fact that officers are no longer aristocrats, it is still the case that the jobs for enlisted personnel in the military are generally more technically- and task-oriented than those for officers. The promise of skills training could also be more important to the enlisted person expecting to enter the civilian labor market in the skilled labor category. In any labor market, technical skills are more important for the laborer than for the manager. Officers may be less concerned and thus less susceptible to recruiting that touts occupational skills.

OS4: enlisted personnel will be guaranteed occupational specialties before obligating themselves to service, and will have more choice in the matter. Officers will not be guaranteed specialties, and their specialty assignment will be largely up to the organization.

Another possible alternative hypothesis is that *all* the difference (if there is one) will be market-driven. Regardless of the relative importance of skills certification on the market, it is always preferable to the individual to know what he will be doing before he obligates himself and to have more rather than less influence over what his task will be. Thus, we might expect that when recruiting is difficult, militaries will offer guarantees and allow the recruits a great deal of personal choice in order to entice them to join, and when there are no recruiting difficulties, the organization will take a more demand-driven approach, assigning people where it needs them most without reference to their preferences.

OS5: specialty assignment practices will vary with the ease or difficulty of recruiting – the more difficult recruiting becomes, the more concessions the organization will make to the potential recruit.

In this project, I do a preliminary test of this hypothesis by 1. asking personnel officers whether occupational specialty assignment practices are at all flexible to respond to recruiting difficulties and 2. by checking to see whether specialty assignment practices have changed at all over time (or in some cases by region). Because these preliminary tests indicated no support for the hypothesis except in the case of the United States, and

due to the difficulty of collecting detailed data on recruiting goals and success over a sufficiently long period of time, a rigorous, cross-sectional time-series test of this hypothesis was neither feasible nor necessary. It is certainly an avenue for further study as more data builds up.

These hypotheses are tested in Chapter 4.

2.2.3.3 Terms of Contract and Separations Policy

Employers use the terms of employment contracts as one way to manage their human resources. Contracts introduce certainty into the employment relationship and allow both the employer and the employee to develop realistic expectations about the other's future behavior. Some of the areas likely to be covered by an employment contract are the length of the employment relationship, the conditions under which the employment relationship may be terminated, the function the employee will be expected to perform, and any training he or she can expect the employer to provide. These things may not be explicit in the contract, as they may be subject to wider sectoral rules or negotiated agreements, but they will usually constitute part of the implicit contract.

Terms of contract tend to differ somewhat systematically between CCMEs and LMEs. While I do not wish to over-state this claim – especially as there has been some convergence in the last twenty years or so with the growth of fixed-term contracts in CCMEs – it is still the case that there are significant and systematic differences between these two types of economy. This is especially true with respect to the ease of quitting a

job or firing an employee, and the type of training an employee can expect. As mentioned in the discussion on Varieties of Capitalism, CCMEs are more likely to feature formal training in both firm-specific and transferable skills, while LMEs are more likely to feature informal training that is often firm-specific but also contributes to general human capital. As LME companies are habitually less interested in formal training certification than in work experience, this is not necessarily a disadvantage for individual LME employees, but there is evidence indicating that this sort of arrangement cannot sustain a high-skills/high-wage equilibrium (Lynch 1994; Hall and Soskice 2001). This section will address the issue of contracting and separations policy: how easy it is to quit or fire, and how functional military needs shape military policies on voluntary and involuntary separation.

Continental Coordinated Market Economies tend to be characterized by longer job tenure and higher job security than LMEs (Hollingsworth 1997, esp. 145f.; Hall and Soskice 2001, 9ff.). Firms are more willing to invest in worker training in transferable skills when they can count on benefiting from that worker's productivity over a long period (Streeck 1997, 37; Crouch 1999, 32; Wagner 1999; Lynch 1994). Workers are more willing to invest time in firm-specific training when they can be certain that they will be paid well and not have to seek a job elsewhere in the near future. The high training-long tenure equilibrium in CCMEs is thus dependent on guarantees to both the employer and the employee that a termination of the employment relationship will not be easy or

sudden. Quits are generally subject to long notice periods and often to non-competition clauses, which sometimes make it difficult to leave one job for another. The power of unions and the consensus-based nature of negotiations between unions and employers' associations in CCMEs generally results in contract conditions which make it particularly difficult to fire workers (Streeck 1992; Streeck 1997, 37; Soskice 1994). When profitability dips, layoffs tend to be a last resort, and individually unproductive workers will often be (re-) trained rather than fired (see e.g. International Labour Organization 2000, 157).

Liberal Market Economies, even where unions are relatively strong and active, tend not to feature as much employment protection as CCMEs (Nicoletti et al. 2000, 46f.).²² They are characterized instead by low job security and flexible, short-term contracts which can be extended in modules and voided easily from both the employer's and employee's sides. By not putting specific protections in place for the employee, LME arrangements generally tend to favor the employer over the employee (with the exception of highly-skilled or professional employees).²³ Employees can usually void the

²² Nicoletti et al. also show that, while the three LME countries remained low and stable on the employment protection scale over time, both Germany and the Netherlands relaxed their employment protection practices somewhat, but remained much higher than all the LMEs. What is more, most of that loosening of protection came in the realm of fixed-term contracts rather than indefinite contracts, meaning that those people who were already more at-risk due to having a fixed-term contract saw their protection go down.

²³ In the United States, at-will employment is still the default position. The United Kingdom and Ireland have both had to implement unfair dismissal laws limiting the employer's ability to fire without cause, partly as a result of the 1996 Council of Europe's Social Charter. That Charter made it impossible for any employer to dismiss an employee on the grounds of the employer's desire alone. This means that some

employment contract as easily as the employer simply by giving notice. It is generally easier for an employee to void a contract in an LME than in a CCME.

Unions have little power over most sectors of the economy, and firms often address low profitability by firing unproductive workers (see e.g. Graham 1997, 126f.; Hollingsworth 1997, 145f.). Rather than investing in formal training (the “make” option), firms prefer to hire employees with experience from other firms (the “buy” option) (cf. Buckley and Michie 1996, 2). The general skills characteristic of workers in LMEs and the flexibility of firms also makes the external labor market in these countries somewhat more active and attractive, further increasing the turnover rate and decreasing average job tenure (Hall and Soskice 2001).

Since at least the 1980s, there has been a trend toward fixed-term contracts in both CCMEs and LMEs (Auer 2000, 19f.; Nicoletti et al. 49f.).²⁴ The main difference between the two types of economy is not so much that lifetime or “indefinite” contracts are more common in CCMEs, but rather that an indefinite contract represents far more

ground recognized as legitimate must be given in good faith in order for the dismissal to be legal (except sometimes during probationary periods) (European Commission 1997). However, it is still easier to fire employees in the UK and Ireland than in Germany or the Netherlands, and much easier in the United States than in the UK or Ireland.

²⁴ The picture is somewhat complex. Over the period 1985 to 1997, fixed-term contracts increased at a greater rate in the Netherlands (50%) than in Ireland (30%), and as of 1997 the percentage of all contracts which were fixed-term was actually higher in the Netherlands (11.4%) than in Ireland (9.4%). Austria trailed at 7.8%, although its fixed-term contracts had risen almost as fast as the Netherlands’ had (Auer 2000, 19-20 and Table 2.16). “Fixed-term employment now affects around 8 to 11 per cent of the labour force” in the small European economies of Austria, Denmark, Ireland, and the Netherlands (Auer 2000, 19f.). About 90% of fixed-term contracts are turned into permanent contracts in all four countries (Auer 2000, 20).

security in a CCME than in an LME, because of the difference in job/employment protection. A contract in a CCME that is for an unspecified time (“*unbefristet*” in German) usually means that the person’s employment status is secure until retirement, barring redundancies or bankruptcy. In an LME, an unspecified contract generally means that the person can leave at any time, but also might be fired at any time. In short, putting a specified time period on a contract in a CCME introduces insecurity (because the person will have to look for work again instead of knowing he is secure), while a specified time period on a contract in an LME introduces some security (because the person usually cannot be fired before the contract is up, and at least knows *when* he or she will have to look for work again).²⁵ The market meaning of military contracts will vary based not just on the type of contract, but on the context.

Militaries generally have an urgent need to invest a great deal of time and resources in training – both firm-specific and occupational (i.e. transferable). Companies which train heavily in firm-specific skills usually have to guarantee a certain amount of job security in order to offset the lack of market value of such skills. Companies can afford to train in transferable skills only if they can count on retaining the employee long enough to recoup their investments. Thus, a military’s functional need to engage in these

²⁵ This being said, it is not the case that all potential employees in CCMEs necessarily want an unspecified contract, nor that all those in LMEs want a specified one.

two types of training means that it must also make both quitting and firing difficult.²⁶ In a CCME context, quitting and firing need not necessarily be any more difficult than they are in the civilian sector, since the same training issue is present there. In LMEs, however, militaries must make both quitting and firing more difficult than it is in the private sector, in order to safeguard their investment.

At the same time, all militaries which plan on any kind of operational activity need a large proportion of their personnel to be young and physically and mentally fit. This functional need indicates that militaries cannot simply offer long tenure to everyone, as they would quickly have an unbalanced rank profile and a force that was far too old to engage in operations. Granting life-long or even long-term contracts also risks clogging promotion chains for the young and career-oriented.²⁷ In short, militaries

²⁶ In theory, militaries in countries which have well-established vocational training schemes ought to be able to take advantage of that and hire people who already possess the occupational/transferable skills. However, those schemes usually involve business cooperation, and as the military cannot generally offer indefinite contracts, and military service carries a risk of spending a large amount of time on non-occupational activities, the military would not be as attractive as other businesses as a training place. If the military were instead trying to hire those individuals who had done an apprenticeship and failed to secure employment through their training companies, it would be faced with the “lemon” problem (Akerlof 1970). The operative question then becomes whether it is better to have “lemons” trained at some other company’s expense, or better to do the training “in-house”. It must be noted that those who managed to find training places, even if they subsequently failed to find employment, have already been through a strenuous selection process and are more likely to be good candidates for employment than those who failed to find a training position at all. Thus it is not unreasonable for militaries to want to hire such people. It may, however, be very difficult for the military to appeal to such individuals due to its limited contracts.

²⁷ It has been suggested (in e.g. Williams 2004) that military hierarchies could be flattened in the new information warfare context. It might be argued that the introduction of tracks like the *Fachunteroffizier* in the German army or of ranks such as Specialist in the American Army are an attempt to do just that: to create positions only loosely integrated into the overall military hierarchy, with no command responsibilities, and based purely on technical skills. However, any comprehensive reorganization with the

must facilitate personnel turnover; they must have a means to separate people from the organization, even if the employees themselves do not want to leave. This need runs directly counter to the need to offer job security and to recoup large training investments. The result is a requirement for the military to have control over its employees at both the beginning and the end of the contract.²⁸ How exactly it controls them, however, ought to be influenced by the economic context.

Finally, militaries have a particular need to prevent a certain kind of quitting, namely, quitting during operations (desertion/Absence Without Official Leave/Unauthorized Absence). Such “quitting” is normally considered a criminal activity in all militaries and is distinguished from conscientious objection by the failure of the individual to go through official procedures for objection. Since this is a criminal rather than economic matter, I will not include it in the general discussion, but it should be kept in mind as an extension of the control which militaries need to exert over their personnel.

Main Hypotheses:

Separation can be either voluntary or involuntary. Voluntary separation is when the individual chooses to leave the service, and in the hypotheses I will be particularly

goal of actually eliminating ranks would be an enormous and costly undertaking, and is in the author’s opinion unlikely to happen in the near future.

²⁸ This is of course often a disincentive to individuals either to join the military or to remain in it at various decision points.

concerned with voluntary separation at times other than the end of a specified contract period.²⁹ There are two forms of involuntary separation which I call “ordinary” and “extraordinary”. The former takes place at organizationally designated control points such as mandatory retirement ages or limits on time in service. These are points where the military has built in the ability to separate personnel it has determined it no longer needs. Procedures are routine and purely administrative. Extraordinary involuntary separation is the kind that requires the organization to take extra action, such as separation for redundancy or as a result of a court-martial. When I discuss extraordinary involuntary separation in this context, I will be referring to such things as redundancy and minor negligence as opposed to proceedings on criminal or medical grounds.

According to the discussion above about differences between LMEs and CCMEs, we expect CCME firms to have more trouble separating people while LME firms have more trouble retaining them.³⁰ We should expect militaries in LMEs not to have a general problem of too many people wanting to stay, but rather a problem of the *less*

²⁹ The end of the contract period is an opportunity for both the individual and the service to terminate the relationship. However, it would be very difficult to obtain data on this issue. Even if it were possible to get data from multiple countries on numbers of personnel separating at termination of contract, numbers of applications for re-enlistment, and numbers of re-enlistment applications turned down, that might not capture the dynamic of signaling within the organization that tells an individual not to bother re-enlisting because he is likely to be turned down. Even the basic data, however, is not currently available in many countries.

³⁰ One interesting aspect of the dynamic in LMEs is that the attractiveness of job security in an LME is likely to be higher for lower quality workers (as they would be at greater risk of being fired all other things being equal), leading to a potential adverse selection problem in LMEs. That being said, it is possible that even high-quality workers would value job security (e.g. for family reasons), so this particular adverse selection potential should not be over-emphasized.

desirable people wanting to stay. CCMEs, on the other hand, ought to have a general problem of too many people wanting to stay. Thus for LMEs the problem is one of structuring incentives for the right people to stay *plus* introducing control points for the organization to choose who should leave. This indicates that we should observe multiple control points and high ease of “extraordinary” involuntary separation. For CCMEs, the problem is one of introducing some relatively painless way to make a certain number of people leave at around the “right” point in time. This indicates that we should see relatively few control points in CCME militaries and a high reliance on those control points rather than on “extraordinary” involuntary separation. This minimizes uncertainty for the employee.

TC1: contracts in LME militaries ought to feature a larger number of points where the organization has a structured opportunity to end the employment relationship against the individual’s will (involuntary separation), than contracts in CCME militaries.

This is basically a measure of the “ease” of what I will call “ordinary” involuntary separation, or separation on the initiative of the organization which does not require extraordinary legal or administrative action. The hypothesis states that ordinary involuntary separation ought to be easier in LMEs than in CCMEs.

While I expect extraordinary involuntary separation to be somewhat difficult in all militaries due to their need to provide some kind of security to their employees, I do expect its ease to vary with the context. In LMEs, therefore, I expect extraordinary

involuntary separation from the military to be easier than it would be in CCMEs. This is because such firing is simply more normal in LMEs than in CCMEs in general.

TC1a: Extraordinary involuntary separation ought to be easier in LME militaries than in CCME militaries

In LMEs, we should also expect quitting to be more difficult than in normal civilian life, firing to be equally or more difficult than in normal civilian life, and contract, promotion, and retirement systems which are more turnover-oriented than those in CCMEs. In CCMEs, we should expect quitting to be equally or more difficult than in normal civilian life, firing to be equally or more difficult than in civilian life, and contract, promotion, and retirement systems which minimize uncertainty and turnover. Overall, both quitting and firing in CCME militaries should be more difficult than in LME militaries.

TC2: Contracts in CCME militaries ought to be more likely than those in LME militaries to structure the individual's opportunities to leave the service voluntarily, while opportunities to leave voluntarily from LME militaries ought to be relatively unstructured.

This is a measure of the ease or difficulty of leaving the military voluntarily: in CCMEs I expect there to be more restrictions on voluntary exit, whereas in LMEs I expect the individual to have more freedom to leave the organization at a point of the individual's own choosing. I expect CCME militaries to want to provide greater

structure than LME militaries, partially as a guarantee to the employer and partially to ease career planning for the employee.

In most CCMEs, there are labor laws limiting the number of fixed-term contracts an employer can offer to an employee in succession, as well as the number of years an employee can work for the same employer on a fixed-term rather than indefinite contract. These rules are designed to force employers to give employees lifetime job security after a certain point. The military, as noted above, needs to keep people long enough to recoup its training investment, which is generally longer than two years, but will not want to keep them for their working lifetime. I expect these contract rules to be suspended for the military in order to facilitate out-processing.

TC3: In CCMEs, militaries ought to be able to offer fixed-term contracts for longer periods than private-sector employers can.

It should be clear from the discussion above that human capital theory requires militaries in LME settings to make voluntary separation much more difficult than it is in the civilian economy. Because voluntary separation in CCMEs is normally difficult due to the training the workers receive, voluntary separation from the military in a CCME can be equally or only slightly more difficult than it is in the civilian sector.

TC4: voluntary separation ought to be more difficult in LME militaries than in LME firms. It ought to be equally or slightly more difficult in CCME militaries as/than in CCME firms.

By the same token, LME militaries must make involuntary separation much more difficult than it is in the civilian economy, because the training system requires the organization to provide some job security. Due to the large amount of resources invested, LME militaries prefer to rehabilitate than to fire, while firing is the preferred solution in the private sector. Since CCME firms and CCME militaries have the same training issues, the difficulty of involuntary separation ought to be approximately equal.

TC5: Involuntary separation ought to be more difficult in LME militaries than in LME firms. It ought to be equally difficult in CCME militaries and firms.

Alternative Hypotheses:

I noted above that certain objective features of military personnel needs, such as age and health, and militaries' desired structural profiles (pyramid) are very similar regardless of cultural, economic, or even mission-orientation differences. The human capital argument alone would predict that all militaries ought to make ordinary involuntary separation easy and voluntary separation difficult.

TC6: terms of contract and ease of separation will be very similar across all countries.

Another possible alternative explanation would be that militaries which are more active and expeditionary need to be more efficient, and will thus exhibit the pattern mentioned above of easy involuntary separation and difficult voluntary separation (i.e. the interests of the service will have greater weight than the individual's preferences).

Militaries which have a less expeditionary mission posture will form a different group, which will have similar policies featuring less organizational control.

TC7: In expeditionary militaries, voluntary separation will be difficult while involuntary separation will be comparatively easy; in non-expeditionary militaries, voluntary separation will be somewhat easier and involuntary separation somewhat more difficult than in the expeditionary ones.

2.3 Framework for Theory Testing

2.3.1 Selection of Cases

Since the claim being made here is that labor market structure is a significant explanatory variable, the most important factor in choosing countries to study is variation in their types of market economy. As practical limitations require the number of countries studied to be held down, there will be three LMEs (the USA, the United Kingdom, and Ireland) and two CCMEs (Germany and the Netherlands). For arguments classifying countries into these economic groupings, see Hall and Soskice (2001, esp. Introduction), Auer (2000, 55-56), Culpepper and Finegold (1999), and Esping-Andersen (1990). Most VoC writing treats Germany as the archetypal CCME, and the Netherlands as closely related.³¹ The USA and UK are usually considered the archetypal LMEs. As

³¹ Austria and Belgium could also be classified as CCMEs, although Belgium has some commonalities with France. The Netherlands were the best case for this study, as they moved to an all-volunteer force in the early-mid 1990s while Austria maintained conscription and Belgium presents some problems on the

both CCMEs are European countries, ideally I would have controlled for EU effects by considering only EU member states – hence the choice of Ireland as the only other LME in Europe. It was impossible, however, not to take the USA as a case, because it is the basis for the vast majority of the scholarly literature on personnel policy, and many of the hypotheses were thus derived from the American experience. Due to the mitigating influence of the European Union on the UK and Ireland (on e.g. Unfair Dismissal rules), the USA is also now the purest example of a Liberal Market Economy. There is, however, no reason why this study could not be expanded to include non-EU LMEs and other types of CMEs, especially if a large-N study were to be done. Most developed countries in the Anglo-Saxon commonwealth tradition are classed as LMEs (Canada, Australia, New Zealand), and other possible groupings include the Scandinavian CMEs (Norway, Sweden, Denmark, Finland, Iceland), the Mediterranean group (Spain, Portugal, Italy, Greece), and the Asian CMEs (Japan, South Korea, and possibly Taiwan). France does not fit well into any of these categories, but could still be analyzed using the more detailed aspects of educational system and labor market which I identify.

The logic of the theory indicates that we should see variation in certain policy areas across country-groups. Within countries, we may expect to see some change over time, but with conditions attached: first, if relevant elements of the national economic

categorization of economic type. Austria's system of conscription is flexible enough to make analysis of market mechanisms plausible, and would be a good case for further testing.

structure (to include the educational system) change, then changes in military personnel policy (with some time lag) would not be unexpected and would support the theory. There is ample evidence that the CCME countries have done some economic liberalizing since the end of the Cold War, while most LME attempts to introduce CME features have been unsuccessful. Second, if personnel change is attempted for some exogenous reason, but the economic infrastructure remains unchanged, we may expect consequences (potentially positive or negative) for recruiting and retention. While this study will not be able to establish the effects of policy changes on recruiting and retention, it should be noted that such an analysis would be a further test of the theory.

The time period under study, 1990-2005, ought to be characterized by a certain amount of change in personnel policies, as many governments believed that militaries needed to be downsized and restructured to encounter the post-Cold War threat environment. My theory indicates that such restructuring should take place largely under the influence of national economic structure.

If this were a large-N study, the most appropriate method would be a pooled cross-sectional time series analysis, as inferences depend on both single-point cross-country and time-series country-internal comparisons. Although I am not doing a multivariate regression for this project, the logic of comparison remains the same and I will attempt a qualitative version.

It might be objected that factor endowment or personnel tempo differ so significantly among the five states I have included that it will interfere with the activity of my independent variable. I have specifically chosen countries so that most other potentially confounding factors either cross-cut my variable or do not vary at all, and thus provide potential controls. Germany, the USA, and the United Kingdom have much larger economies than the Netherlands and Ireland. Thus each basket of LMEs and CCMEs contains both large and small economies. Germany and the Netherlands deploy approximately equal percentages of their military personnel overseas,³² and although Ireland is a neutral country, it is an energetic member of the United Nations, and deploys significant (for its tiny size) numbers of defense personnel on peacekeeping missions throughout the world. The United States and Britain, of course, deploy large percentages of their personnel on missions ranging from very low to very high intensity.

Thus all five countries may be considered to use their militaries for overseas missions, with the Americans and British on the high end and the Irish, Dutch, and Germans on the low end. The USA and Britain may be considered expeditionary forces, the other three are not. Although this means that I do not have an expeditionary-force

³² As of summer 2005, Germany had around 7,000 personnel in foreign deployments (http://www.bundeswehr.de/C1256EF4002AED30/DocName/Einsaetze_Home) and the Netherlands about 2,000 (<http://www.mindef.nl/>). These constitute slightly less than 3% of the German military and around 2% of the Dutch military.

military in my CCME basket,³³ it will still be possible to see whether there are clear splits between Ireland and the other LMEs, or whether the USA and UK are the most similar countries of the five. Finally, as the EU develops its defense identity, all four European countries can expect even more missions to appear on their agendas. All of these countries have concerns about recruiting, retaining, and managing their people well.

2.3.2 Method

My theory argues that market economy type is an important independent variable for military personnel policy. More specifically, I argue that the stratification and standardization of the educational system, the importance of skills certification on the labor market, the structure of vocational training, the flexibility of contracts, the robustness of the external labor market, and the extent of employment protection measures will shape military policies on selection, accessions, occupational specialty assignment and training, terms of contract, and separations. In order to test the hypotheses, I use qualitative data from the five countries, supplemented by statistical data when available. I use the official regulations for each military to establish what the policies on the abovementioned areas (selection/accessions, occupational specialty assignment, terms of contract, and separation) in fact are. It may strike the reader that this is a dangerous reliance on *de jure* procedures, and that in reality organizations often

³³ The obvious choice would have been France. Unfortunately, in the VoC literature, France is difficult to categorize, and therefore might have introduced a number of problems on the Independent Variable dimensions.

do not follow regulations precisely. I therefore supplement the policy data with data from multiple semi-structured interviews with military and civilian officials and academics, as well as official statistical data where it was available, in order to determine the practical meaning and relative importance of the regulations. This is an imperfect measure, but in the absence of relevant statistical data it is the best option for understanding general patterns.

3. Selection and Accessions Policies

The last chapter explained how we may expect military selection and accessions policies¹ to vary depending upon the differing educational systems associated with Liberal and Continental Coordinated Market Economies, and on the differing significance of educational achievement and certification on the labor market. In this chapter, the hypotheses related to selection and accessions are tested against qualitative empirical data.

To summarize, the main hypotheses were:

SA1: Educational certification should be a less flexible selection criterion in the selection process for CCME militaries than for LME militaries.

SA2: LME militaries ought to feature aptitude testing to substitute for the lower salience of educational certification, while CCME militaries should not need aptitude testing (except as it relates to occupational specialty assignment).

SA3: The number of points of access to the military and tracks within the military will correspond roughly to the number of tracks in the school system.

¹ "Accessions" is the military term for how people actually enter the organization, as opposed to how they are selected for the organization. This is an important distinction given that most militaries must deal with large numbers of individuals who are selected for service but who then decide not to report for the oath.

SA4: The more highly stratified an educational system, the more difficult it will be to move from one track to another within the military, without achieving the necessary civilian certification.

SA5: LMEs will be more likely than CCMEs to have flexible monies available for enlistment and re-enlistment bonuses.

The alternative hypotheses were:

SA6: Selection and accessions will be very similar in the United States and the United Kingdom, which have similar mission orientations; they will also look very similar in Ireland, the Netherlands, and Germany, whose mission profiles differ from the USA and UK, and are similar to one another.

SA7: There will be no patterns whatsoever in number of tracks, number of points of entry, or permeability, as selection and accessions will be determined by path-dependent, idiosyncratic, national bureaucratic accretion.

The results are mixed, but do give support to my theory. Several of the negative results seem to be attributable to the simplicity of the hypotheses. This was a necessary characteristic of first-cut hypotheses, which needed to be clear and above all falsifiable. The logic of the theory, however, is supported. At the end of the chapter, I discuss possible refinements.

The next sections explain the general character of each country's educational system, give predictions based on the hypotheses, and examine the data on the military organizations.

3.1 Liberal Market Economies

3.1.1 The United Kingdom

3.1.1.1 Education

The educational system in the United Kingdom is generally characterized by moderately low stratification and moderately high standardization (see Chapter 2 for definitions). In secondary school, there are essentially two tracks: one can exit either at the minimum school-leaving age of 16 with the General Certificate of Secondary Education (GCSE) or a General National Vocational Qualification (GNVQ), or one can exit at 18 with a General Certificate of Education (GCE) A-level or AS-level, or an Advanced Vocational Certificate of Education (AVCE).² Since a certain number of passing GCSE exams are a pre-requisite for the A-levels, it is a relatively simple matter for a student to decide to quit or continue at that point; there is no need to make the decision any earlier. In many cases, a student would not even have to change schools to attend the sixth form, where the higher leaving certificate examinations are given.

² The vocational qualifications are parallel to the academic qualifications, but a relatively small proportion of the school population chooses to pursue them. The designation changed from Advanced GNVQ to VCE A-level in 2000 (http://www.qca.org.uk/14-19/qualifications/index_a-levels.htm).

Scotland has maintained its own system and terminology, but there are widely recognized equivalencies between the Scottish certifications and those used in Wales, England, and Northern Ireland. The quality of education may vary somewhat, but as the leaving certifications are based on an exam system, and the exams are nationally regulated, the standardization can be characterized as moderately high (moderate because of the differences between the composite portions of the United Kingdom).

On average, over the period from 1999 to 2005, 44.3% of economically active 19 to 21 year olds in England³ attained a secondary degree requiring them to attend twelve years of school (GCE A/AS level, or GNVQ), 41% attained a secondary degree requiring only ten years of schooling (GCSEs or equivalent), and 7.7% attained no certification at all.⁴ The distribution of young people choosing each track is clearly relatively well-balanced, which would tend to indicate higher stratification. However, the short decision times and the ease of switching tracks gives the United Kingdom a somewhat lower stratification (“moderate-low”). The fact that exams and certification are national (see also next chapter) gives the system a high level of standardization. In terms of the hypotheses, we should expect to find that the type of certification required for military

³ Economically active is defined as either employed or unemployed by the ILO definition.

⁴ These figures are from tables provided by the Department for Education and Skills, and are the best information I was able to obtain. The figures do not add up to 100% because I have omitted those with higher degrees. Unfortunately, many of the states under study do not keep comparable statistics on school leavers. Percentages of school-leavers per year achieving various levels of certification were not available from the United Kingdom. The figures available for the entire United Kingdom were not broken down by age group, and those figures which were broken down by age group were for England only, which is why I refer to England alone here.

service is somewhat flexible (SA1), and that aptitude testing is a routine part of the selection process (SA2). The number of tracks (2) indicates that we should expect two tracks and two access points to military service (SA3), and the low significance of certification combined with the moderately low stratification of the system indicates that we should expect military service alone to contribute something towards movement from lower to higher tracks (SA4). We should also expect signing bonuses to be available as part of the recruiting effort (SA5).

3.1.1.2 Selection and Accessions

The Army has no general minimum educational requirements for enlistment.⁵ Each occupational specialty has its own educational qualifications, however, usually consisting of a certain number of GSCE exams including certain subjects at a minimum grade of C. These educational qualifications are specifically related to the job to be performed. The educational requirements are subject to some flexibility: if a recruiter thinks an individual has potential, based on his aptitude test score and his interview, and his educational qualifications miss the bar only barely, the recruiter can refer the individual case to a Senior Personnel Selection Officer, who can review the case and make a decision whether to admit the person by “shading” (waiving) his educational requirements.

⁵ See <http://www.armyjobs.mod.uk/RegularArmy/Requirements/Qualifications/Soldier/>

The first step is to fill out an application form. After an administrative check on the application, the applicant takes the BARB (British Army Recruit Battery) test. This is a classic general aptitude test, with no attitudinal components. The individual's score on the test yields a list of all the jobs in the Army for which that score is sufficient, which the recruiter discusses with the applicant. The list is narrowed by the applicant's educational qualifications (as some jobs for which the test score qualified may require GCSEs which the applicant does not have). Finally, the recruiter will check to see which jobs have vacancies opening up, and the recruiter and applicant will discuss which of the available jobs would be most suitable. The person then goes through medical and physical testing, which will determine suitability for military service, and must meet the somewhat flexible background check requirements.

Officer selection functions differently. The minimum educational requirements for entering officer training are five GCSE exams with grades of C or better, including English, mathematics, and either a science subject or a foreign language, plus 140 UCAS Tariff points at AS/A level.⁶ This amounts to a requirement that individuals be qualified for some form of higher education, but not necessarily for university study.

Applicants with the required qualifications must attend a one-and-a-half day briefing on the Army Officer Selection Board (AOSB Briefing). If they pass the briefing,

⁶ The UCAS (Universities and Colleges Admissions Service) Tariff system is a way to make all the different types of secondary level training and certification comparable by turning them into numeric values. For more information on this system, see the UCAS website at <http://www.ucas.ac.uk>

they attend the three-day selection process at the AOSB itself.⁷ Both the Briefing and the Board require applicants to go through a number of interviews and written and oral exercises to “assess [their] intellectual, practical, physical, and leadership potential”.⁸ These include group discussions, planning exercises, and problem-solving exercises, as well as an individual interview. There is no aptitude test like the BARB.

The next step after success at the AOSB is attendance at the Royal Military Academy at Sandhurst (RMAS). The typical commissioning course is one year (44 weeks). University studies are not a regular part of officer training. In recent years, the Army has focused its recruiting efforts on university graduates, and now claims that over 80% of its officer candidates are graduates.⁹

The very fact that selection requirements are different for officers and enlisted points to the hypotheses about accessions. There are essentially only two tracks in the UK military – officer and enlisted – and there are only two points of access: one can enter at the bottom of the enlisted ranks, or at the bottom of the officer ranks.¹⁰ This

⁷ The name was changed to Army Officer Selection Board in 2006. Up until then, it was known as the Regular Commissions Board (RCB).

⁸ Army Career Guide: Officer, RG/BRO/109 February 2004, produced for the Ministry of Defence by Army Recruiting Group, pg. 9.

⁹ Army Career Guide: Officer, RG/BRO/109 February 2004, produced for the Ministry of Defence by Army Recruiting Group, pg. 8

¹⁰ The exception is professionally qualified individuals who wish to be commissioned (PQOs). They may enjoy elevated rank upon commissioning. Usually this applies to medical personnel, and they will usually have the rank of captain upon completion of their (shorter) commissioning course and training. See Table 7 below.

corresponds roughly to the two-tracked educational system (SA3). As for permeability, the British Army has one informal and one formal process to allow enlisted personnel to receive a commission. If a soldier's potential is recognized by a commanding officer early enough, then he or she may simply apply for candidacy like any other person under 29 years old. In such cases, the usual educational requirements obtain and there is no particular benefit or selection bonus for having served in the enlisted ranks. The formal process, called a Late Entry commission, allows enlisted personnel who have reached the rank of Warrant Officer (see Appendix B Military Ranks) to be commissioned directly to the rank of Captain, without reference to the usual educational requirements.¹¹

The British Army does have some options for offering recruits financial incentives, but they are relatively limited and inflexible. One option is a recruit bounty – infantry and artillery soldiers and officers who manage to recruit friends receive £1,300 (\$2,530)¹² for each recruit who successfully completes Phase II (specialty) training. A second is “Golden Hellos” – bonuses for certain difficult-to-recruit occupational specialties, the amounts of which vary depending on educational qualifications. The Army also offers bursaries – money available to assist recruits who wish to complete

¹¹ In 2003-2004, Late Entry officers constituted about 20% of commissions from Sandhurst (175/889, not including “foreign and commonwealth” officers, but including PQOs). Professionally Qualified Officers constituted about 10% of commissions (92/889). See <http://www.armedforces.co.uk/army/listings/10140.html>

¹² As of winter 06/07.

training outside the military in certain difficult-to-recruit occupational specialties. Finally, the Army uses what it calls “commitment bonuses”, which are promised lump sum payments to be distributed at a period of between five and eight years of service, provided the soldier has not given notice to leave the Army. These are actually retention tools, but they are offered as an enlistment incentive.¹³

Education is certainly a somewhat flexible criterion for both enlisted and officers. For enlisted, educational requirements are subject to waiver while the aptitude test is not (SA1). All enlisted must take the aptitude test, but there is no minimum cut-off point except insofar as there is some functional specialty which has the lowest aptitude test score and if one’s score is below that, one cannot qualify for any military service (SA2). There are two tracks in the educational system and two points of entry to the military¹⁴ (SA3). The educational system is characterized by moderate-low stratification, and movement from the enlisted to the officer track is possible if the individual either 1. meets all the normal criteria for officership and chooses to pursue a commission or 2. reaches high enlisted rank and has some kind of expertise – military or technical – which the Army would like to reward and retain. No particular civilian credentials are necessary for the move from Warrant Officer status to commissioned officer status, and

¹³ http://www.army.mod.uk/linkedfiles/museums/sldr_mag_manning_1_.pdf

¹⁴ There are actually three points of entry if PQOs are counted. Since I am looking at the influence of the secondary schooling system and PQOs in nearly all countries must have had post-secondary schooling, the existence of an entry point for them is simply an extension of the logic that educational tracks correspond to entry points.

in fact the usual educational requirements may be waived (SA4). The British Army does have somewhat flexible monies at its disposal to improve targeted recruiting (SA5).

Table 4: Summary of Selection/Accessions Variables United Kingdom

Variable	Expected	Result
Education Criteria Flexible?	Yes	Yes (waivering possible for enlisted, no general educational standards for enlisted, officers' criteria somewhat stricter)
Aptitude Testing?	Yes	Yes for enlisted, but used only for occupational specialty placement, not selection; No for officers
Number of Tracks	Two	Two
Points of Access	Two	Two
Permeability	High	High: Late Entry officers' prior service substitutes for normal officer selection criteria
Bonuses Available?	Yes	Yes

3.1.2 Ireland

3.1.2.1 Education

The educational system in Ireland is similar to the British in that there are essentially two tracks. Pupils can leave at 16 with a Junior Certificate, or they can stay to age 18 and sit for Leaving Certificate examinations. There are three types of leaving certificates available, similar to the British system: the Established Leaving Certificate, the Leaving Certificate Applied,¹⁵ and the Leaving Certificate Vocational (see Gleeson 1998, 61). As in Britain, it is a relatively simple administrative matter to change one's

¹⁵ The Army does not accept the LCA for officer cadets.

mind about the certificate one wants to take, and the decision is made by the sixteen-year-old pupil him- or herself. The tracks are subsequent rather than parallel.

Cohort studies of pupils in secondary education began with the 1994 cohort. These numbers are not directly comparable to those of the other countries, but they do serve as some indicator of stratification. On average, 81.5% of the 1994 and 1996 cohorts left school with a secondary degree requiring twelve years of schooling (i.e. the Leaving Cert), 12.9% left school with only ten years of schooling (the Junior Cert), and 5.6% attained no certification at all (Dep't of Education and Science 2003 (pg. 7) and 2005; Gorby et al. 2005 fig. 2; for earlier figures see Breen et al. 1995). This yields a system with quite low stratification. Standardization in Ireland is quite high, with a national body overseeing curricula and administering exams (Hannan et al. 1998). There are few or no institutionalized links between education and business for vocational training (Hannan et al. 1998).

Because Ireland is an LME, we should expect again to find that the type of certification required for military service is somewhat flexible (SA1), and that aptitude testing is a routine part of the selection process (SA2). The number of tracks (2) indicates that we should expect two tracks and two access points to military service (SA3), and the low significance of certification combined with the low stratification of the system indicates that we should expect high permeability from lower to higher tracks (SA4). Ireland may be expected to use enlistment bonuses as an aid to recruitment (SA5).

3.1.2.2 Selection and Accessions

The Irish Defence Forces have no minimum educational requirements for enlisting. Because the IDF does not specialize as early or as thoroughly as the British Army, there are also no minimum educational requirements for particular occupational specialties. An individual must satisfy the Interview Board and the Manpower Office that he or she “possess[es] a sufficient standard of education for service in the Army”,¹⁶ but in practice until recently that has meant satisfying the board of basic literacy and numeracy. Both because the IDF is confident that its recruiting pool is large enough to cover its needs, and because it is concerned about increasing the quality of its enlisted personnel, it is likely that testing will be introduced soon.¹⁷

Anyone interested in enlisting in the military fills out an application form, and as long as he is eligible, he will be invited to a Brigade Manpower Office for an interview. The only forms of certification he must bring to the interview are a birth certificate and two letters of reference; these letters of reference, however, must be either from (1) a sergeant or higher in the armed forces, (2) a serving member of the *Garda Síochána* (the police), (3) a priest or member of the clergy, or (4) a principal or teacher at a school which the applicant has attended. The interview aims at determining an applicant’s

¹⁶ <http://www.military.ie/careers/armycond.htm>

¹⁷ Interviews with LtCmdr Eamonn Lucey, Manpower Office, Dublin, 26 July 2006, with Cpt Anita Hogan, Defence Forces Psychologist, 27 July 2006, and Cmdt Philip Smyth, former Brigade Manpower Officer, 27 July 2006.

general suitability and aptitude for military life. Each Brigade is authorized a certain intake level, and the Manpower Offices generally have enough freedom to pick and choose whom to accept. The first 12 weeks of the initial 16-week training are treated as a probationary period, at the end of which the IDF decides whether it wishes to retain or discharge the recruit, and during which the recruit can choose to leave without penalty.

As in Britain, officer selection in Ireland follows a different pattern from that of enlisted selection, and there are minimum educational requirements for officer candidates. All officer candidates must have *either* a university degree (Honours Bachelor) *or* have at least six passing papers from their Leaving Certificate examinations.¹⁸ This is essentially a requirement that candidates be eligible to enroll at the National University of Ireland, Galway.

Applications are screened by the Recruitment and Competitions Office in Dublin, and any applicant not meeting all of the basic age, citizenship,¹⁹ educational, physical, and medical standards is disqualified. All qualified applicants are interviewed at various centers, and at that point a police background check is initiated. The applicant

¹⁸ Specifically, they must have a grade of C3 or higher on three Higher Level papers, and of D3 or higher in three Ordinary/Higher Level papers, including Mathematics, Irish language, and one foreign language, and this must be achieved in a single sitting of the Leaving Certificate exams. For more information on the Irish educational system, see <http://www.inca.org.uk/>.

¹⁹ Ireland, unlike most other European countries, allows not only Irish citizens, but also persons with legal Refugee status, citizens of other EU countries plus Iceland, Liechtenstein, Norway, and Switzerland, and nationals of *any* state who can demonstrate at least five years of legal residence in Ireland, to become officers (since 2006). They have found that this is very helpful for recruiting in the especially challenging area of medical personnel.

then undergoes physical fitness and psychometric (both aptitude and attitude) testing, a group assessment, and a job review in which the applicant is familiarized with what will be expected of him or her during training and officer life. Those qualifying to continue in the selection process will undergo a thorough medical exam and a final competency-based interview designed to “measure” many of the same things as the psychometric testing. Psychometric testing was introduced only within the last five years, primarily as a way to improve retention by identifying and screening out those applicants least likely to adjust well to Army life. The psychometric test scores help the selection board cut the lowest ranking applicants from the process when it is unable to interview all applicants due to personnel and time restrictions, but there is no minimum passing score. Retention rates have in fact improved dramatically.²⁰

Once a candidate is accepted to cadetship, he or she goes to cadet training at the Cadet School, Military College, Defence Forces Training Centre, for a 15-month course (reduced from 21 in 2005). Upon successful completion of the course, the cadet receives a commission. University study is now considered part of officer training for all those who were not graduates upon commissioning. Following their commissioning and a 16-month posting with a unit, young officers are sent to the NUI Galway at public expense, to study for degrees which fit the needs of the service.²¹ Since 2004, it has been the policy

²⁰ Interviews with Cpt Anita Hogan, 26 July 2006, and LtCmdr Eamonn Lucey, 27 July 2006.

²¹ Interview with Cpt Caoimin Keane, 26 July 2006; see also http://www.military.ie/careers/cadet_army.htm

of the Irish Defence Forces to target university graduates in their officer recruiting efforts,²² and as of 2005, approximately 35% of cadets were already university graduates (RACO 2006, 2.5.9).

As for accessions, nearly everyone must start at either the bottom of the enlisted ranks or the bottom of the officer ranks. Aside from the usual exception for Professionally Qualified Officers (see Table 10 below), there is only one significant exception to this rule: officer applicants already holding an Honours Bachelor are commissioned with the rank of Lieutenant rather than Sub-Lieutenant.²³ There is no opportunity to enter the enlisted ranks at any level other than Private Grade I (lowest rank), regardless of educational level. Thus there are two tracks in the educational system, and two main tracks in the Defence Forces, but three points of entry (four if PQOs are counted). Complicating things somewhat is that within the officer track, there is a “mini-track” from Captain to Colonel ranks for so-called “technical officers”. This option is for officers who take technical degrees at university, and who prefer to work within their specialties without command responsibilities, but there is no special entry point for it and no rank benefit (i.e. technical officers cannot enter service at the rank of Captain).

²² Interview with Cmdt Gerry Cooney, 25 July 2006.

²³ Interview with Cmdt Gerry Cooney, 25 July 2006.

In terms of permeability, as in the British system, anyone serving in the enlisted ranks who is still below the maximum age limit (28 years old in Ireland) can apply for officer candidacy. Unlike in the UK, however, serving members of the Defence Forces receive points bonuses in the selection process for their service. The Defence Forces have specifically targeted young prior enlisted along with university graduates in order to populate the officer corps with more highly qualified people.²⁴ There is no specific program, however, for allowing older prior enlisted to move to officer rank.

Ireland does not budget for enlistment bonuses of any kind. The IDF has not had trouble recruiting since the end of the Cold War. The only exception is the difficulties they have encountered in recruiting medical personnel, but so far the Ministry has not focused on pay and bonuses to improve that situation.

²⁴ Interview with Lt.Col. Peter Marron, 31 July 2006.

Table 5: Summary of Selection/Accessions Variables Ireland

Variable	Expected	Result
Education Criteria Flexible?	Yes	Yes (very flexible for enlisted, stricter for officers)
Aptitude Testing?	Yes	No for enlisted; yes for officers, no minimum passing score, but might be used to rank people and cut the lowest
Number of Tracks	Two	Two
Points of Access	Two	Three (officer candidates with bachelor's degree get one rank advantage)
Permeability	High	High – all prior enlisted get points for service, but no special program to allow older prior enlisted to enter officer ranks
Bonuses Available?	Yes	No

3.1.3 The United States

3.1.3.1 Education

The American school system is characterized by very low stratification (Allmendinger 1989, 236). American students all attend the same kind of primary and secondary schooling,²⁵ with some variation in whether it is public or private and in which grades are educated together. Some states allow students to leave high school at age 16, without having achieved any kind of certification, while others require

²⁵ In asserting that students all attend the “same kind” of primary and secondary school, I do not mean to imply that differences such as public/private, charter, magnet, and so forth do not exist or do not matter. As with the other countries under study, differences of kind in schooling refer to the kind of curriculum offered, and the kind of certification/leaving examination associated with the school.

attendance until the normal leaving age of 18. One either receives a high school diploma or one does not; there are few other options. It is possible to acquire a General Educational Development certificate (GED) by means of testing, but that is the extent of general secondary educational certification.²⁶ Without one or the other of these certifications, entrance to post-secondary education (except of a vocational kind) is impossible (for an overview, see Kerckhoff 1995, esp. 330f.). This being said, the percentage of 15-24-year-olds leaving grades 10-12 with a diploma or GED has hovered between 93-96%²⁷ since 1990, and the percentage of the general population with a secondary certificate is around 85% (U.S. Census Bureau, CPS 2004). This is essentially a one-tracked system.

Because the USA is an LME, we should expect the type of certification required to join the military to be flexible (SA1), and we should expect aptitude testing to be a significant part of the selection process (SA2). Due to the extremely low stratification of the educational system, the theory would predict only one track within the military. This is somewhat unrealistic; there have been very few militaries across either time or space which did not differentiate between enlisted and officer, so we should expect two tracks

²⁶ A GED is technically equivalent to a high school diploma, in that it entitles the bearer to enter university studies, but the military, like many other employers, considers a GED less desirable simply because not having completed high school often indicates a lack of self-discipline.

²⁷ National Center for Education Statistics http://nces.ed.gov/pubs2006/dropout/figures/figure_1.asp

and two points of entry (SA3), and permeability ought to be high (SA4). Bonuses ought to be available as recruiting tools (SA5).

3.1.3.2 Selection and Accessions

The United States Army requires a high school diploma or its GED equivalent for enlisted service,²⁸ and some occupational specialties within the Army require additional qualifications. Furthermore, all those interested in joining the enlisted ranks must take the ASVAB (the Armed Services Vocational Aptitude Battery), which “measures your knowledge and ability in ten different areas, from math to electronics”.²⁹ As with most other aptitude tests, the ASVAB is not an IQ test, but a test of abilities in certain areas. The test takes three hours and consists of ten tests,³⁰ which makes it much longer and more comprehensive than the British BARB (which takes about forty minutes and covers five areas). One must score a minimum of 31 on the AFQT (Armed Forces Qualification

²⁸ See AR 601-210 pg. 11: the regulations permit non-high school graduates with AFQT scores of 85 or higher to enlist, but in practice neither the Army nor the Marine Corps will accept recruits without at least a GED, and both services strongly prefer high school graduates. The Army and the Marine Corps both cap the number of GED recruits they will take (3-5%), and those recruits must have a minimum score of 50 on the AFQT. Low AFQT scores are not waiverable for GED applicants. The USMC usually does not even approach the cap on GED applicants (usmilitary.about.com, interview with Peter Delorier, 8 Feb 2007).

²⁹ http://www.goarmy.com/contact/how_to_join.jsp

³⁰ “The ASVAB tests cover General Science, Arithmetic Reasoning, Word Knowledge, Paragraph Comprehension, Numerical Operations, Coding Speed, Auto and Shop Information, Mathematics Knowledge, Mechanical Comprehension and Electronics Information.” (From http://www.goarmy.com/contact/how_to_join.jsp). However, at the end of 2002, the Department of Defense eliminated Numerical Operations and Coding Speed and added “Assembling Objects”.

Test) portion of the ASVAB³¹ in order to be eligible for enlistment. The AFQT is a percentile score, and Congress has passed legislation that no one scoring 0-9 (Category V) may serve in the military at all, and that no more than 20% of accessions in all services could score between 10-30 (Category IV-A, B, and C). Those scoring in Category IV must have a high school diploma (GED is not acceptable) and an AFQT waiver to enlist.

The selection process begins as usual with an application which must be administratively screened. Those meeting the basic age,³² citizenship,³³ health/physical, and character (i.e. criminal/disciplinary record) requirements will take the ASVAB at a school or recruiting office. Provided their scores are good enough, they will then go to a Military Entrance Processing Station (MEPS), where they will undergo a medical exam and be sworn in.

The process for officers is, again, different. To be commissioned as an officer, one must have a bachelor's degree, but only a high school diploma is required for officer candidacy, and there are three different ways to enter the officer track. The most

³¹ The AFQT is calculated from the ASVAB sections on Word Knowledge, Paragraph Comprehension, Arithmetic Reasoning, and Mathematics Knowledge. This is the part of the ASVAB which counts for selection. The rest of the test is used to determine occupational specialty fit.

³² As of Autumn 2006, the US Army was allowing people up to 41 years old (under certain circumstances) to join, although the normal maximum age is 31
(<http://www.goarmy.com/jobCatList.do?redirect=true&fw=careerindex&bl=>).

³³ Both American citizens and legal permanent residents are allowed to serve in the enlisted ranks.

traditional way is to attend the US Military Academy at West Point.³⁴ Admission to the Academy is highly competitive: hopefuls must have an above average high school transcript³⁵ and score very well on standardized college admissions tests (SAT or ACT – tests of general aptitude in verbal, mathematic, and comprehension skills). They must pass a physical fitness test and a medical exam. They must obtain nominations from their congressmen to attend. Serving enlisted personnel do not need a congressional nomination, but they do need the endorsement of their commanding officers to apply to attend the USMA prep school. They must meet the same requirements, except that they may possess only a GED and may have slightly lower standardized test scores. Both prior service and civilians must be cleared in a background security check.

At the U.S. Military Academy, cadets will receive a high-quality academic education, including a mandatory engineering component, in a thoroughly military environment and including all the necessary military training. The education takes four years, is free of cost (publicly financed), and those who are successful receive a Bachelor of Science and an officer's commission, and are obligated to serve five years in the

³⁴ Applicants must be American citizens, between 17 and 23 years old, unmarried, and without responsibility for children (women may not be pregnant).

³⁵ Their Grade Point Averages must be very high, and they must have four years of high school English, four years of college preparatory mathematics (to a minimum level of trigonometry), two years of a foreign language, two years of laboratory sciences (e.g. chemistry or physics), and one year of U.S. history, government, or economics.

Army. The Navy and the Air Force also have service academies, which function similarly to West Point.

A second option is to do Reserve Officers' Training Corps (ROTC). This program is for young people who wish to attend a civilian university for their undergraduate studies, but to train as an officer at the same time. ROTC often offers generous scholarships which may cover most or all of the cost of even a private university education. The selection process for ROTC is more decentralized than that for West Point: in most cases, the Army's primary concern is that the applicants meet their chosen university's standards for admission. Applicants must have a minimum score of 920 on the SAT or 19 on the ACT and a minimum high school Grade Point Average (GPA) of 2.5, and they must submit three evaluations/recommendations from high school officials.

The ROTC cadre interview promises applicants to determine the individual's motivation for joining ROTC and his or her leadership potential. The Army is interested in whether the person is purely financially motivated, or whether the person has a genuine desire to serve his or her country. ROTC applicants do not take a military aptitude test (the standardized college entrance exams substitute), but they must pass a medical exam and must have the potential to reach an acceptable level of physical fitness by the end of the first two years. Scholarship cadets must also obtain a security clearance.

ROTC cadets attend courses in military science, participate in physical fitness programs, and undergo tactical training, all in addition to their normal courses of undergraduate studies. During the summer before their senior year, ROTC cadets attend a six-week officers' basic course. Upon successful completion of both their training and their undergraduate education, cadets receive their commissions and are obligated to serve for up to five years (depending on their scholarships). Despite the program's title, most cadets receive a commission in the active rather than the reserve component.³⁶

The final option is to attend Officer Candidate School, which is an intensive 14-week officer training course for (1) civilians who already possess a bachelor's degree, (2) currently serving enlisted personnel who achieve a certain minimum score on national standardized college admissions tests and who are in a position to complete a Bachelor's Degree within the next year, and (3) civilians with professional qualifications in the medical, legal, or pastoral professions (PQOs). Civilians with a bachelor's degree must take the ASVAB and earn a minimum score, pass a medical exam, and earn a security clearance. They will be interviewed by the Recruiting Battalion OCS Board, which is concerned primarily with whether the individual appears to have the proper and sufficient motivation to succeed at officer training. If Battalion recommends acceptance, the Army Recruiting Command OCS Review Board makes a final determination. Serving enlisted personnel must have an SAT score of 850 or an ACT score of 19 and

³⁶ Interview with LTC H. Charles Hodges, 31 October 2006.

their commanding officer's endorsement. Serving enlisted personnel applications go through their chains of command and consist mainly of an essay and interview.

The US Army, like its British and Irish counterparts, has two main tracks: officer and enlisted. It also has a third "mini-track" for warrant officers. While the warrant officer track is an exclusive promotion zone, it is almost always internally recruited from mid-level or senior enlisted personnel. It is possible for a civilian to enter service as a warrant officer only as a pilot.³⁷ All others wishing to become warrant officers must have the rank of at least E-5 (sergeant) and at least four to six years of experience in a specialty relevant to the military occupational specialty (MOS) in which one wants to gain a warrant. This is an opportunity to become a technical specialist without command responsibilities. Warrant officer status does in some ways constitute a way to advance past enlisted rank without meeting the normal civilian educational requirement (CWO2s receive commissioned officer legal status but not rank): warrant officer hopefuls must meet minimum aptitude test scores, but need not have a bachelor's degree.

All four service branches allow individuals with certain qualifications or experience to enter service at slightly elevated enlisted ranks: the Army allows those with a bachelor's degree to enlist at the rank of E-4 (Specialist/Corporal) if they have specialist qualifications, and those with other kinds of qualifications (e.g. Junior ROTC

³⁷ Even in the case of pilots, the Warrant Officer Recruiting website (<http://www.usarec.army.mil/hq/warrant/>) indicates that interested parties might also consider enlisting first before becoming warrant officers. Those wishing to become warrant officers must possess either a high school diploma or a GED.

credit or some college credit hours) to enlist with the ranks of E-2 or E-3. The Air Force and Navy allow Advanced Enlistments up to the rank of E-3, and the Marine Corps offers the advanced rank of E-2. These options exist as incentives recruiters can use to attract people with desirable traits, but are by no means limited to educational qualifications.

As for permeability, enlisted personnel can of course enter the warrant officer track. It is also possible for enlisted personnel to become officers through the so-called Green to Gold (G2G) program. They receive age waivers based on their prior service,³⁸ but no specific extra “points” in the officer selection process, as prior service personnel in Ireland receive. They also do not receive elevated rank, like British Late Entry officers. Those serving as either enlisted personnel or warrant officers can also go through OCS if they already have a bachelor’s degree. The US has a moderate level of permeability, where military service counts enough to mitigate certain educational or aptitude requirements in certain cases.

The U.S. Army offers enlistment bonuses which can be orders of magnitude greater than those offered by the British Army, to recruits possessing vital skills and/or willing to serve in occupational specialties which have trouble filling their quotas. These

³⁸ The age limit waivers or extensions are based on both length of prior service (G2G ROTC cadets can be up to 30 years old upon graduation, if they have had at least three years of enlisted service) and on whether they are receiving a scholarship or not (non-scholarship ROTC cadets may be up to 32 years old upon graduation).

one-time bonuses can be up to \$40,000, but are more often \$10-\$15,000.³⁹ Applicants for enlistment may also receive cash bonuses for various levels of education beyond the minimum required, as well as for specific civilian skills (e.g. language proficiency) which the Army needs.⁴⁰

Table 6: Summary of Selection/Accessions Variables United States

Variable	Expected	Result
Education Criteria Flexible?	Yes	Somewhat (the flexibility on enlisted personnel is subject to upper limits, and the officer criteria are strict)
Aptitude Testing?	Yes	Yes (enlisted take the ASVAB, officers will take either the ASVAB or one of the standardized college entry aptitude tests (SAT or ACT)), both officers and enlisted must meet minimum passing scores to join the military
Number of Tracks	Two	Two
Points of Access	Two	Six: one bottom enlisted and one bottom officer, one for PQOs such as doctors, and three at very low enlisted ranks (E-2-4) and not necessarily linked to educational achievement.
Permeability	High	Moderate
Bonuses Available?	Yes	Yes

³⁹ See http://www.goarmy.com/benefits/money_bonuses.jsp#Enlistment

⁴⁰ For all bonuses currently available, see http://www.goarmy.com/benefits/money_bonuses.jsp. Although the types and amounts vary, the principle of budgeting to provide flexible monies for recruiting bonuses is well-established in the USA.

3.2 Continental Coordinated Market Economies

3.2.1 Germany

3.2.1.1 Education

The German school system is far more highly stratified and standardized than those of the LMEs. Primary school usually lasts only four years (in some *Länder*, six) and culminates in a decision, made by teachers and parents when the child is around ten years old, on which track a child should continue to pursue. It is relatively difficult and unusual to transfer to a higher track, and this plus the early timing of the decision indicate high stratification (cf. Allmendinger 1989, 235; Hinz 1999, 160; Erlinghagen 2004, 105-107).

The system is organized around three different types of leaving certificate: the *Hauptschulabschluss*, the *Realschulabschluss* (or *Mittlere Reife*), and the *Abitur* (or *(allgemeine) Hochschulreife*).⁴¹ The most basic, the *Hauptschulabschluss*, is the default. These students usually attend school through ninth (and in some cases tenth) grade, complete exams, and then attempt to enter further vocational training. The middle track (*Realschulabschluss*) was traditionally the path taken by young people interested in banking, secretarial work, nursing, or other non-manual labor which nonetheless did not

⁴¹ Although they are completely different types of certification, I include the *Fachhochschulreife* with the *Abitur* throughout this section (including statistics) because both confer the right to study at a post-secondary educational institution as opposed to vocational training, and both require about the same number of years of schooling.

require academic study at a university. Students attend school through the tenth grade, take exams, then enter the vocational training system. The third track prepares students for study at a university. They normally attend a *Gymnasium*, where they stay until thirteenth grade and receive an *Abitur* on completion of their subject examinations.⁴² Students who choose to leave school without successfully completing exams of any kind receive an *Abgangszeugnis*, which certifies that they completed the required number of years of school, but which will not stand them in good stead when they try to find a (scarce) vocational training opportunity.

The percent of school-leavers with only a *Hauptschulabschluss* has declined slightly since 1992 (from around 21.4% to 19.2%), and a general perception among many urban Germans is that only those children who have difficulty with the German language (i.e. immigrants) still go to *Hauptschule*. What is certainly true is that it has become ever more difficult to get a vocational training opportunity (*Ausbildungsstelle*) with only a *Hauptschulabschluss* (Soskice in Lynch 1994, 41; Kelle and Zinn 1998, 73-74). The percentage of school-leavers with a *Realschulabschluss* has stayed very steady at around 32-33%, and the percentage of school-leavers with a *Hochschulreife* of some kind has stayed mostly steady around 26% (with a slight downward trend).⁴³ The school system thus has three distinct tracks, with school leavers relatively evenly distributed

⁴² Those who are interested in slightly more applied sciences can take the exams for a *Fachhochschulreife* after 12th grade.

⁴³ All statistics on school leavers are from the *Statistisches Bundesamt* and are available upon request.

across them, little upward permeability, and a very early decision point, classifying it as highly stratified. Leaving examinations are standardized at the *Bundesland* level, but are generally comparable throughout the whole country.

Educational certification is extremely important in the German labor market (see e.g. Erlinghagen 2004, 180ff.; Solga 2005). It is very difficult to find a job without the appropriate leaving certificate, and in some cases it is disallowed by law for persons without particular kinds of certification to go into business for themselves.⁴⁴ This is relatively typical of Coordinated Market Economies (Hinz in Culpepper and Finegold 1999; Krüger in Culpepper and Finegold 1999). It is in this sense telling that the website for the *Bundeswehr* lists career options under the headings of the kind of education an interested person has. This is in contrast to the sites for the British, Irish, and American militaries, which list opportunities by military track (enlisted or officer).

The hypotheses on selection indicate that we should expect the military's requirements about educational certification to be inflexible, and that educational certification ought to be a major element of the selection process (SA1). We should also expect that, if aptitude testing is used, it should be used only as a means to assign functional specialties rather than as a selection criterion (SA2). The hypotheses on accession indicate that we should expect three tracks within the military and three

⁴⁴ e.g. craftsmen who do not have a *Meisterbrief* – the certification of higher vocational education. This requirement is beginning to be relaxed.

accession points, one for each track (SA3). We should also expect to see very little possibility of movement between tracks (SA4). There should be no use of enlistment bonuses (SA5).

3.2.1.2 Selection and Accessions

The German military does in fact have multiple tracks, and selection for each of them is linked to educational certification. There are four promotion tracks, which do not flow automatically into one another: the *Mannschaften* (lower enlisted ranks), the *Unteroffiziere* (technical specialists), the *Feldwebel* (traditional NCOs), and the *Offiziere* (commissioned officers). Entry into the *Mannschaften* requires only an *Abgangszeugnis*. Entry into the track of *Unteroffizier* requires at least a *Hauptschulabschluss*, but it is also possible to enter the *Unteroffizier* track laterally at a higher rank if one is in possession of a *Realschulabschluss* or a certificate of successfully completed vocational training (*Berufsausbildung*). Entry into the *Feldwebel* track requires either a *Hauptschulabschluss* plus a *Berufsausbildung* or a *Realschulabschluss*. Lateral entry to the rank of *Feldwebel* (bypassing the rank of *Feldwebelanwärter/in*) requires a successful *Meister* status (higher vocational training – possible only with a successful school *Abschluss* and *Berufsausbildung*) (see Table 10 below).⁴⁵ In practice, however, there is very little lateral entry to the *Unteroffizier* track, and even less to the *Feldwebel* (interview with

⁴⁵ All regulations can be found in the *Soldatenlaufbahnverordnung* (SLV).

Stabsoberfeldwebel Konrad Bittl, 4 July 2006). Nearly everyone entering these tracks is doing so in the hopes of receiving vocational training.

Germany still maintains a policy of conscription, but over the last ten years, the percentage of the *Mannschaften* composed of those doing conscript service (*Grundwehrdienstleistende*, GWDler – as of late 2006 nine months' service) has declined from close to 79% to approximately 38%. The percentage of the *Mannschaften* doing voluntary extension of conscript service (*Freiwillig zusätzlichen Wehrdienstleistende* FWDler – as of late 2006 up to 14 months extra) has risen from around 14% in 1996 to 25% in 2005. Because the procedure for conscientious objection is so simple, in effect, no one with any level of objection to military service is conscripted for such service. Objectors will normally have to do alternative civilian service, but even that is not always the case.⁴⁶ Three months of the conscript's service are taken up with basic training, and one further month is usually spent in specialist training. Conscripts cannot be deployed outside of Germany, and their time in service is not long enough for them to acquire in-depth vocational training or job experience. Those extending service

⁴⁶ The right to conscientious objection to armed service is enshrined in the German Basic Law (*Grundgesetz* Art. 4(3)), and rates of conscientious objection have risen relatively steadily since the 1970s. All that is required is a statement that armed military service would violate the person's conscience; no affiliation with a recognized pacifist organization or investigation of the validity of the claim is necessary. There are not always enough positions for conscientious objectors to do alternative service; those who cannot be placed are released from the obligation.

voluntarily can be deployed overseas, and may acquire valuable work experience, but are unlikely to receive certifiable vocational training.⁴⁷

Approximately 30% of those entering temporary-career status (*Soldaten auf Zeit*) come from the ranks of the GWDLer and FWDLer.⁴⁸ The only differences between selection for conscripts and for volunteers are that the medical standards are higher for conscripts, the aptitude test is not required for conscripts, and education level is usually irrelevant. Anyone who has done conscript service who then wishes to enter contract service will have to take the aptitude test and must possess the appropriate level of education for his desired track.

Those wishing to enter the *Bundeswehr* directly from civilian life must first apply, meet basic age, citizenship (one must be a German citizen in order to serve in the military in any capacity), physical, and health requirements, and undergo a medical exam and aptitude testing⁴⁹ at one of four testing centers (*Zentrale fuer Nachwuchsgewinnung, ZNWG*) for *Mannschaften, Unteroffiziere*, and *Feldwebel*, or at the Officer Candidate Testing Center (*Offizierbewerber Prüfzentrale, OPZ*) for officers. Everyone, regardless of what track he wishes to enter, must take the aptitude test. One's

⁴⁷ Although they may be able to get a heavy vehicle driving license, which is normally very expensive.

⁴⁸ Interview with Oberstleutnant Michael Buchfeld, 15 August 2006; figures provided by BMVg PSZ/Z-ZIP.

⁴⁹ A computer-based aptitude test which assesses six areas of competence: logical thinking (completing patterns), language comprehension (word relationship test), spelling, arithmetic, understanding of mechanics, and understanding of electronics. The test is also meant to assess an individual's ability to concentrate.

score on the aptitude test serves basically to help the *Bundeswehr* to determine the best job match, but it also feeds into an overall score placing applicants in a ranking.

The selection process varies little for the different non-officer tracks. Everyone is assessed by the recruiters through the aptitude tests and interviews, and those with the educational qualifications, interest, and potential to enter the *Fachunteroffizier* or *Feldweibel* tracks are usually put into those tracks. Occasionally, individuals who possess the necessary qualifications but whose suitability for military life is not clear will be steered toward a lower track with the possibility of moving up. Everyone does the three-month basic training phase together, following which they each go off to their specialist training, at the end of which those who are candidates for *Fachunteroffizier* or *Feldweibel* grades must pass an exam appropriate to their track. Those who fail the exam usually finish their contract period in the *Mannschaften*.

In order to enter service as an officer, a young person must (in nearly all cases) have a *Hochschulreife* allowing post-secondary studies. The *Bundeswehr* invites the most promising applicants to the OPZ to go through a battery of tests. The *Bundeswehr* website states that only a little over half of applicants get invitations to the OPZ, and of those, fewer than one-third will actually be offered contracts.⁵⁰ At the OPZ, hopefuls will go through a two-day battery of tests including an essay, further aptitude testing,⁵¹ and

⁵⁰ <http://mil.bundeswehr-karriere.de/>, "Ihre Bewerbung: Eignungstests: Offizierbewerberpruefzentrale".

⁵¹ Assessing verbal competence, basic mathematical competence, and logical thinking.

specific knowledge tests related to their desired courses of study. They will also undergo an individual interview aimed at understanding their motivation and particular career expectations. At the end of this interview, applicants are informed whether they may continue with the testing or are being sent home.

Those allowed to continue then participate in a group situational test. Following this is an individual advising session regarding courses of university study which would suit both the *Bundeswehr* and the candidate. All officers not already possessing a post-secondary degree will go through one of the *Bundeswehr* universities.⁵² After the advising session, the applicant goes through a full medical and psychological evaluation, and finally the physical fitness test. For those who pass all these tests successfully, the last element of the process is another interview, in which the applicant's course of study and occupational specialty are finalized. There are nearly always more successful applicants than the *Bundeswehr* universities have places. Thus, the point of this talk is to come to a result that is acceptable to both sides – which may involve the applicant's second or third choice – and it is at this point that one's test results and ranking become important. The better one's test results, the more likely one

⁵² Strictly speaking, this is not true. There is a handful of individuals who have only a *Realschulabschluss* and a *Berufsausbildung* who do not have to go through university or *Fachhochschule* studies to become officers, but they are so few as to be irrelevant. They tend to be hired when they can demonstrate proficiency in a particular skill needed by one of the service branches at the time, yet seem particularly unsuited for academic study.

is to get one's first choice of major subject. However, if the second or third choice is not acceptable to the individual, he or she may simply decline the offer.

As mentioned above, there are four promotion tracks in the *Bundeswehr*. As for official access points, there are in fact nine. Not only does German law allow access at the bottom of each of the four tracks, given the minimum educational requirements, but it allows lateral entry to two different higher ranks within the *Fachunteroffizier* track (which also constitute lateral entry to the *Feldwebel* track, since those ranks must be passed through during training),⁵³ directly to the rank of *Feldwebel*,⁵⁴ and to two higher ranks within the Officer track.⁵⁵ All of these possibilities for lateral entry are tied directly to different levels of certification in academic or vocational education.⁵⁶

The regulations state that anyone serving in a lower track may try to switch to a higher track, if they meet the required educational criteria. Up until six or seven years ago, the *Mannschaften* was still considered the place to try out military service and see if one wanted to move up the ranks, but that is no longer the case. The *Bundeswehr* now

⁵³ It is possible to avoid most of the training period and enter service laterally at a higher rank if an individual already possesses certification of civilian vocational training in the relevant specialty (SLV Ch. 3 §13).

⁵⁴ With a *Meister* certification – a Master Craftsman.

⁵⁵ German law allows for the lateral entry of ANYONE possessing a higher degree, from a Bachelor's up to a Ph.D., in any scientific field, given a need for the individual's services (SLV Ch. 4 § 28). This is much broader than the usual allowance for Professionally Qualified Officers.

⁵⁶ It appears to be possible to enter service at a higher rank if one can show the non-educational equivalent of particular levels of certification – an average of about 8% of those entering at a higher rank in 2005-06 had no vocational certification – but these numbers are extremely small.

tries to make its personnel selection and assignment as targeted as possible; those who are qualified for higher tracks are encouraged to enter them directly rather than go through the *Mannschaften* first. Moving from one track to the other is reportedly quite rare (interviews with Oberstabsfeldwebel Bittl et al. 4 July 2006, with Buchfeld, Skambraks, Kirsch 15 Aug 2006).

The *Bundeswehr* does not offer enlistment bonuses of any kind.

Although education is clearly an inflexible criterion, which supports SA1, aptitude testing is also required for every applicant. However, the aptitude tests function primarily as a way to determine where to place a person within the *Bundeswehr* (i.e. as identifying certain areas of aptitude) rather than a means of determining general suitability for service in any of the tracks (SA2). Hypothesis SA3, regarding the congruence of educational and career tracks, is not completely supported, but neither does the evidence indicate that the hypothesis is completely wrong. In fact, it indicates that the logic behind the hypothesis was sound, but the predicted observable implications need to be refined. The *Fachunteroffizier* track was only recently created, and its creation fits into the German school and training system. The German military – like the civilian economy – simply takes vocational training just as seriously as general academic education. The hypothesis on permeability (SA3) found qualified support: Germany's highly stratified and largely impermeable school system looks very similar to its highly stratified and largely impermeable military. In both cases, the regulations

indicate that movement between tracks ought to be possible in theory; it simply does not happen much in practice. However, this appears to have become the situation starting around 1999/2000: up until that point, it was still normal for people in the *Mannschaften* to move up to the *Feldwebel* track (this was before *Fachunteroffizier* existed as a track). Movement from *Fachunteroffizier* to *Feldwebel* is extremely rare.

As for movement from the enlisted to the officer ranks, Germany allows it once minimum service requirements have been met. One must be at least 21 years old and hold the rank of *Feldwebel* (possible only within the *Feldwebel* track) in order to become an officer cadet. Those with higher ranks (i.e. *Hauptfeldwebel* and *Oberfeldwebel*) may enter officer cadet status with higher ranks. These higher ranks, however, correspond only to training ranks, so such officers will not be commissioned directly to the rank of e.g. Captain, like British Late Entry officers.

Table 7: Summary of Selection/Accessions Variables Germany

Variable	Expected	Result
Education Criteria Flexible?	No	No (only alternative to educational certification is certified vocational accomplishment; each point of entry associated with very specific certification levels)
Aptitude Testing?	No	Yes, officer and enlisted, but used primarily for occupational specialty placement
Number of Tracks	Three	Four
Points of Access	Three	Nine
Permeability	Low	Low
Bonuses Available?	No	No

3.2.2 The Netherlands

3.2.2.1 Education

The Dutch school system, like the German, is characterized by three distinct and well-defined secondary school tracks.⁵⁷ Unlike the German system, however, the decision as to which track a young person will follow is not made until he or she has had eight years of primary schooling and two years of secondary schooling, and is around fourteen or fifteen years old. This still indicates somewhat high stratification, as the decision in most cases takes place a couple of years before the certificate will be attained, and each school-type usually offers only one kind of certificate. Dutch youth may choose to pursue preparatory secondary vocational education (VMBO, *Vorbereidend middelbaar beroepsonderwijs*, four years), senior general secondary education (HAVO, *Hoger algemeen voortgezet onderwijs*, five years), or pre-university education (VWO, *Vorbereidend wetenschappelijk onderwijs* – six years).

Pre-vocational training leads to vocational education (MBO – *secundair beroepsonderwijs*), somewhat similar to the German dual system. Senior general secondary education leads to higher professional education (HBO – *hoger beroepsonderwijs*), offered at universities of professional education (*hogescholen*), typically for practical training in a particular profession (e.g. teacher training or health care work).

⁵⁷ This is the case as of 1999. Before 1999, there were four tracks: VBO (the pre-vocational course), MAVO (intermediate general secondary education), HAVO, and VWO. VBO and MAVO were combined to form VMBO. A useful website for comparing the school systems of certain countries is <http://www.inca.org.uk/>.

Pre-university education leads to a research-oriented university education (WO – *wetenschappelijk onderwijs*), which takes place at a research university (*universiteit*).

From 1998 to 2004, about 53% of school leavers successfully completed pre-vocational secondary education, 16.2% senior general secondary education, and 12% pre-university education. Approximately 18.8% left school with no qualifications (but may have returned for a lower certificate).⁵⁸ This distribution is not as even as it is in the German or even the British system, but is still significant enough to indicate stratification. The decision time is later than the German but earlier than the British, and the tracks are somewhat more permeable than in the German system but also more distinct than the British or Irish. The Dutch system, then, may be classified as having moderately high stratification. This being the case, the hypotheses indicate that we should expect educational certification to be an inflexible and primary element of the selection process (SA1), that aptitude testing should not be an important element in selection (SA2), that there should be around three military tracks and three points of access to the military (SA3), and that movement between those tracks should be unusual but not unheard-of (SA4). There should be no enlistment bonuses (SA5).

⁵⁸ These are my calculations based on figures from the publications “Key Figures 1998-2002: Education, Culture, and Science in the Netherlands” and “Key Figures 2000-2004: Education, Culture, and Science in the Netherlands”, both published by the Ministry for Education, Culture, and Science (*Opleiding, Cultuur, en Wetenschappen*, OCenW). These can be found at <http://www.minocw.nl/english/doc/2004/keyfigures9802.pdf> and http://www.minocw.nl/english/doc/2005/key_figures_2000-2004.pdf respectively. Because there was no direct reporting of the figures I needed, I calculated these percentages from the figures in tables 2.3 (1998-2000), 2.4 (2000-2004), and 2.5 (2000-2004). Therefore, the figures may not be exactly accurate, but they are close enough to be meaningful indicators.

3.2.2.2 Selection and Accessions⁵⁹

The Dutch offer three military tracks: *Manschappen* (lower enlisted ranks), *Onderofficieren* (NCOs), and *Officieren* (officers). One must have a minimum educational attainment of VMBO (BBL) to serve in the *Manschappen*, but it is possible to apply for the *Manschappen* without a diploma of any kind.⁶⁰ Such applicants must take a special aptitude test (the GABT) to establish that they meet minimum intelligence standards. There are minimum educational requirements of HAVO to serve as an *Onderofficier* or a Short-model *Officier*, and of VWO or HBO to serve as a Long-model *Officier*.

The selection process begins, as usual, with an application and the administrative evaluation of that application. This is followed by an interview at a local recruiting office, where the individual is asked about his or her motivation to join, willingness to be deployed, and so forth. One must be a Dutch citizen in order to serve in any capacity. It is also during this interview that the recruiter will discuss the applicant's preferred track, and what job openings are of interest to him or her. If the initial recruiter interview is successful, the recruit will take a battery of "psychological" (aptitude/attitude) tests, another interview, and a physical fitness test.

⁵⁹ Note: all the military personnel with whom I spoke stated that it was possible to enlist in the *Manschappen* without any school leaving certificate, and that doing so was possible only if the individual took and passed a special intelligence test. The Army website states that even *Manschappen* must have a minimum educational certification of VMBO. The discrepancy most likely arises from the supply-demand dynamic: at present, the armed forces are in a position where they do not need to dip into the pool of applicants with no leaving certificates, but they could if they needed to.

⁶⁰ Interview and correspondence with 1stLt Ivo Boshouwers, 13 June 2006; interview with Major van der Veen, 12 June 2006.

At this point, the tracks begin to differentiate in their selection processes. Those wishing to join the *Manschappen* will simply continue with a medical exam and a security/background check, then be sworn in. Those wishing to join as an *Onderofficier* will be sent to an interview with the planning office (*Bureau Leidinggevenden*), and are expected to visit a particular unit, training center, and the *Koninklijke Militaire School* (KMS), which is the non-commissioned officer training school. After these informational visits, they then go to another interview, this time with the Appointments and Advisory Committee (AAC – *Aanstellings en Advies Commissie*), where the applicant and the AAC will come to a mutual agreement about the occupational specialty assignment. If all is successful, the applicant will then go through the medical exam and security/background check.

Officer hopefuls must attend an information open-house at the *Koninklijke Militaire Academie* (KMA) in Breda before they can apply. If their documents, their psychological tests, and their physical fitness test results are in order, they then attend an interview with the AAC, like the *Onderofficiëren*. If that goes well, it is followed by the medical exam and security/background check.

The officer track makes a distinction based on education: for those applicants who have only a HAVO, only the Short-model contract (*Opleiding Kort Model*) is open to them. This consists of a year-and-a-half course of study at the KMA, a five-year contract, and the opportunity to reach a maximum rank of Major. Those applicants who are

qualified for an academic university course of study (i.e. HBO or VWO) have the option of taking either the Short- or the Long-model (*Opleiding Lang Model*). The Long-model involves a four-year course of study at the KMA and a contract for eleven years of service, with no restrictions on highest attainable rank. There is a special option for those who have already completed university (WO, sometimes HBO when the military needs a particular specialty), called the Post-Academic model (*Opleiding Post-Academisch*). This involves a two-year course at the KMA, an eleven-year contract, and unlimited promotion potential.

It is possible to enter service at the bottom of each track, and it is possible to move from one track to another – in fact, the internal labor market is deliberately utilized for recruiting *Onderofficieren*, but not so much for officers (interview with 1stLt Ivo Boshouwers, 13 June 2006). A very small number of senior *Onderofficieren* (around 5-10 per year) can move to the officer track (directly to First Lieutenant) without having to attend the KMA, but they cannot be promoted beyond Captain (similar to the British Late Entry system). It is also possible to enter the *Onderofficier* and *Officier* tracks at elevated rank. In addition to the usual possibilities for Professionally Qualified Officers (primarily doctors and other medical personnel), other persons with certain types of university, professional, or even vocational degrees can enter laterally. There are five points of access to the three tracks. The Royal Netherlands Military does not offer enlistment bonuses of any kind.

Education is important as a criterion, but not quite as important as in Germany. There is no flexibility in the sense that educational requirements can be waived, but there is some flexibility in that the Dutch military offers variation within tracks (e.g. the short- and long-model programs for officers) for those with differing education, to allow them access. In comparative terms, then, hypothesis SA1 regarding the importance of education as a criterion tracks reasonably well (the Netherlands are somewhere between the LMEs and Germany). Furthermore, all applicants – regardless of intended track – take a battery of “psychological” tests, but these are no longer aptitude tests (interview with Cyril van de Ven 16 June 2006); they are primarily tests of attitude, motivation, and leadership potential. All applicants take the same test, but the minimum passing score varies by track. Testing does not replace educational certification (except for those applicants with no leaving certificate), but does play some role in selection (SA2 not well supported).

There are five points of access to the three tracks, with lateral entry allowed for *Onderofficieren* and officers, but not into the *Manschappen*. This is similar to the German system, and although it does not support the hypothesis in the sense that the numbers of access points do not match the educational and military tracks (SA3), it *does* support the idea that educational and military career tracks will match. In keeping with its moderately permeable educational system, the military tracks are also somewhat permeable: movement from *Manschappen* to *Onderofficieren* is relatively normal, but most

officers are recruited directly from civilian life (SA4). Hypothesis SA5 on bonuses is also supported.

Table 8: Summary of Selection/Accessions Variables Netherlands

Variable	Expected	Result
Education Criteria Flexible?	No	Somewhat (no waivers, but some extra options for those with officer potential and insufficient education)
Aptitude Testing?	No	Yes, for officer and enlisted, but only those who have no school certification have to take an intelligence test which they must pass. The others take what is primarily an attitude test, which does serve to screen out individuals with undesirable traits, but is not a substitute for educational certification.
Number of Tracks	Three	Three
Points of Access	Three	Five
Permeability	Medium	Medium
Bonuses Available?	No	No

3.3 Discussion

One argument from the theory was that Continental Coordinated Market Economies, which depend more heavily on educational certification and which tend to enjoy much more specific and highly standardized certification, would have militaries which also depended heavily on educational certification – possibly to the exclusion of other forms of assessment. This would be a cost-reducing measure, *if* one assumes that the information provided by educational certification is all that the military employer

needs to know. I thus hypothesized that educational certification would be a very important criterion in the selection process for CCME militaries, and less important in LME militaries (SA1). I also hypothesized that LMEs would be much more likely to feature aptitude testing as part of the selection process (i.e. have a minimum passing score for entry) than CCMEs (SA2). The logic of this was that lower standardization in the educational system would leave militaries short of information.

The hypothesis on the importance and flexibility of educational certification as a selection criterion found some support in the evidence. As Table 9 (pg. 143) indicates, the three LME countries have mostly low or moderate with one high value, while the CCME countries have all high with one moderate value. The only anomaly is that the USA – with the least standardized and thus least reliable certification system – actually features somewhat more reliance on educational certification than the UK and Ireland. This point requires more research into the historical relationships in each country between the educational system and the military.

As for hypothesis SA2, regarding alternative criteria, the relationship between the educational system and the use of testing turned out to be far more complex than expected. First, only the United States uses aptitude testing as a stand-alone criterion for entry into military service, for both officer and enlisted ranks.⁶¹ Second, for the other

⁶¹ Although the US military does not actually administer aptitude tests to officer candidate hopefuls (except for those going through OCS), it does require and depend on national standardized testing such as the SAT and ACT.

countries using true aptitude testing, the purpose is usually good occupational fit within the military rather than overall suitability for service. Furthermore, some countries also use attitude testing to screen out undesirable personnel, but in no case does testing substitute for personal interviews. The two CCMEs, who were predicted not to need aptitude testing because of their highly specialized and reliable systems of educational certification, use some kind of testing for *both* officer and enlisted applicants.

It is not the case that countries with low standardization use testing while those with high standardization do not. It seems rather that the USA puts particular faith in aptitude testing as a meaningful measurement of overall suitability. That faith seems to have been borne out by a large literature on military effectiveness which uses aptitude test scores as part of the operationalization of “quality” personnel (see e.g. Cook 1972; Dale and Gilroy 1975; Hosek et al. 2004). The Irish Army, too, is seeing an improvement in retention rates with the introduction of testing. It may very well be that all militaries are moving towards testing as a cost-effective way to improve individual-organizational fit. What is interesting in this context is that the use of attitude versus aptitude testing varies apparently without respect to market type. Germany tests everyone on both attitude and aptitude, but does not feature a “passing” score. Ireland tests officers on both attitude and aptitude and is planning to introduce testing for enlisted personnel as well. The Netherlands utilize *attitude* testing for all tracks, but have phased out most aptitude testing except for those with no school leaving certificate. The USA tests only

aptitude, but for both officer and enlisted, and the UK tests only aptitude and only for enlisted personnel. A follow-on project might try to explain these intriguing patterns.

Hypothesis SA3 about the relationship between a country's educational system and the military's tracks and points of access got relatively strong support from the evidence, with some qualification. The hypothesis predicted that the United States should have two tracks (as the minimum for a military), the UK and Ireland should have two each, and Germany and the Netherlands should have three each. The USA, UK, and Ireland do have two tracks (plus an internal mini-track in the USA), the Netherlands does in fact have three, but Germany has four. The hypothesis also indicated that educational certification ought to be an indicator of *access points*, and this turned out to be far too simple.⁶² The United Kingdom really does appear to have a total of only three access points: one at the bottom of the enlisted track, one at the bottom of the officer track, and one into the officer track for persons with professional qualifications in a few specified areas. Ireland has four: one at the bottom of the enlisted track, one at the bottom of the officer track, one up one rank in the officer track for those already possessing a post-secondary degree, and one for those with professional qualifications in a few select areas. The USA features a number of access points which vary depending on armed service: one at the bottom of the enlisted track, up to three more to the low-

⁶² Access points for PQOs constitute an "extra" access point in all of the militaries under study because they depend on post-secondary education and the hypothesis focused on the secondary educational system.

enlisted track for those with various non-certificate educational and non-educational qualifications, one to the warrant officer track for pilots, one at the bottom of the officer track, and one more for Professionally Qualified Officers (total: 5-7). The Netherlands offer five points of entry: one at the bottom of the *Manschappen*, two to the *Onderofficier* track (one at the bottom and one at the rank of Sergeant for those with specialty vocational qualifications), and three to the officer track (one at the bottom, one at 1st Lieutenant for some educational qualifications, and one at *Kapitein* for certain professional qualifications). Germany allows entry at an unprecedented eight levels of service: one at the bottom of the *Mannschaften*, three to the track of *Fachunteroffizier* (one at every possible rank in the track), one at the bottom of the *Feldwebel* track (I do not count the other opportunities for lateral entry to *Feldwebel*, as they are essentially *Fachunteroffizier* ranks), and three to the officer track, at the bottom, the rank of Captain for some professionally qualified persons, and the rank of Major for others.

The pattern we see emerging here is not a simple correspondence between educational certificates and points of entry, but rather the true CME-LME difference on vocational training. Among the LMEs, higher points of access are either not tied to educational certification properly understood (as in the enlisted options in the USA, which are tied to prior military or ROTC experience, or the demonstration of certain character qualities), or they are tied to post-secondary education. The rank advantage for Irish officer candidates already possessing a Bachelor's Degree is meant to put those

individuals on an *equal* footing with their colleagues who will spend most of their time in the lower rank pursuing a Bachelor's Degree. Vocational qualifications do not matter much – the only exception being the point of access for qualified pilots in the USA, and this is attributable to the cyclical difficulty the US Army has retaining pilots.

In the CCMEs, however, the plethora of access points is clearly tied to the way the educational and vocational training systems intertwine. For both Germany and the Netherlands, entry at various ranks and in various career tracks is associated primarily with differing educational *plus* skills attainment. This does not contradict the logic of either the theory or the particular hypothesis, but it does indicate that the hypothesis needs to be refined to improve its predictive power. In an economy where general education is the main criterion of interest for an employer, the stratification of the educational system is probably a sufficient indicator. In an economy where certified vocational skills training is also important, it will be necessary to look at the various possible “ranks” produced by the combined educational and training system. In other words, the relationship between the educational system and the military is not the same in LMEs as it is in CCMEs, analogous to the way the relationship between the educational system and the labor market differs in these two contexts. In the case of military accession, as in many other cases, Coordinated Market Economies exhibit far more structure than do Liberal Market Economies.

It ought to be noted, however, that the option of skills-based lateral entry – that is, entry to one of the NCO tracks at anything other than the lowest rank in that track – is used relatively rarely in both Germany and the Netherlands. I have already mentioned the distinction that Germany prefers external recruitment for all tracks, while the Netherlands tends to recruit its NCOs internally, but in both these countries, it is very unusual to find people already possessing vocational qualifications looking to join the military. Most people joining the military are doing so at least partly in the hopes of *receiving* training. This means that the “lateral entry” options which are based on education alone and which lead into the bottom rung of the various tracks can be widely used, but those options which are based on skills certification are used only rarely.

As for the hypothesis (SA4) on permeability, it seemed to have some purchase. All three LMEs consider prior enlisted service as a mitigating factor for what might otherwise be requirements for officer candidacy, or even as a basis for special consideration. I do not want to over-emphasize this, as it is not the case that prior enlisted in any of the LMEs get extremely preferential treatment; they do, however, get some. In the two CCMEs, there are more tracks and thus more possible interfaces for permeability. In neither case does service in the lower enlisted ranks appear to provide an alternative or mitigating qualification to the educational criteria. In the Netherlands, there is a general preference for selecting *Onderofficieren* from among the *Manschappen*, so in that sense prior service personnel do have an advantage over non-prior service, but

it is not as formalized as it is in the LMEs. Movement from the enlisted ranks to officer is certainly possible, but less common than movement from *Manschappen* to *Onderofficieren*. There does not seem to be any special provision for prior enlisted to become officers. In Germany, with the most impermeable educational system of them all, we also see by far the least movement among tracks (if conscripts are not counted). There is no provision to allow prior military service to substitute for or mitigate educational requirements for the various tracks. Movement from the enlisted to officer ranks is, again, possible, but not enabled in any special way.

Hypothesis SA5 on the use of bonuses was difficult to assess in the empirics. While the only two countries to employ bonuses were LMEs and that accords with the theory, not all the LMEs used bonuses, and the United States seems to be an outlier in the extent to which it uses bonuses and cash incentives. A better test of this prediction will have to wait until CCME militaries face the demographic squeeze, making recruiting and possibly retention much more difficult. The hypothesis was not disproven, but neither was it strongly supported.

Alternative hypothesis SA6, which expected the United States and United Kingdom to be in a group by themselves and Ireland to look very similar to the Coordinated Market Economies, did not fare well. This hypothesis was based on an assumption that very active, expeditionary forces would have different selection and accessions needs than militaries which are less active and tend to operate at a lower

intensity. The USA was indeed an outlier on some dimensions such as its use of aptitude testing, but in no case does Ireland clearly fall in with the CCMEs rather than the LMEs, and the USA and UK do not look conspicuously alike beyond what is predicted by the economic system.

Alternative hypothesis SA7, which predicted idiosyncrasy based on national history and/or bureaucratic and political accretion, found very little support. While each country does of course have unique features, they tend to be in the details. Overall, there is similarity across all countries on some dimensions (e.g. steps in the selection process) and clear groupings on others (e.g. permeability and number of tracks).

3.4 Conclusions

CCMEs do in fact rely more on educational certification for selection than do LMEs, although it does not seem to be a simple correlation with educational standardization. Only one country, the United States, uses aptitude testing as a selection criterion; in all other cases aptitude testing is either one part of a larger picture or simply a way of matching candidates to appropriate jobs. The use of testing – both aptitude and attitude types – does seem to vary in interesting ways, but not as my simple hypotheses predict. LMEs also tend to put more emphasis on references and personal interaction with the recruiters.

It does seem that there is an LME-CCME difference for tracks and points of access, but it is not the simple one-to-one correspondence I expected. Rather, it has to do

with the relative importance of education in connection with the importance and standardization of vocational training. Although the example of the United States indicates that lateral entry need not be tied to educational certification, it certainly seems that lateral entry based on skills (as opposed to characteristics) is easier to manage and justify with a well-defined system of certifications in place. Furthermore, except in the case of Professionally Qualified Officers, it appears that many in the recruiting pool ignore opportunities for lateral entry precisely because one of the attractions of military service is the training they can receive.

The general pattern seems to be that short-term service is desirable as a “bridge period” for people who need a job, or want a little experience, or are not yet sure what they want to do. Encouraging people to make a service commitment beyond three or four years requires a promise of something more: in the CCMEs, where certification is crucial, this must be further training. In the LMEs, it is generally post-secondary academic education. Finally, the permeability of the educational system is a good indicator of the permeability of military tracks.

These findings imply that there is a very real relationship between a country’s educational system, the relationship of its educational system to general civilian employment, and the structure of its military. This is significant both for the Varieties of Capitalism argument, and for those planners attempting to refine or reform military personnel structure, selection, and accessions. The question of whether lateral entry is a

good – or even feasible – option is current in many debates in the United States and elsewhere. The discussion presented here indicates that there are both structural and practical issues to be considered when debating the possibility of skilled lateral entry. In LMEs, the main structural questions involve what kinds of criteria would be used to allow lateral entry to a skilled position, and whether new mini-tracks might need to be created to provide places outside the traditional military hierarchy for technical personnel. The practical issues include problems of how much it would cost to hire and retain skilled personnel off the external market as opposed to training them within the organization. Any cost analysis must consider not only the cost of training versus hiring, but also problems of adverse selection, organizational fit, organizational cohesion, internal equity, and so forth.

The problems in CCMEs will probably be different: if it is more difficult to recruit high-quality people to join the armed forces in CCMEs, then the internal labor market becomes a more important source of quality higher-level personnel. There is no apparent reason why the armed forces in CCME countries could not rely more on internal markets at least from enlisted to NCO ranks, as long as they continue to provide civilian-certified vocational training to qualify people for the higher tracks.

As mentioned above, we expect the rigor of the selection processes to be approximately equal across countries. Table 11 (pg. 146) lists the steps of selection processes in each country. While this indicates that the number of steps in each country

is approximately the same and that many of the steps are remarkably similar, it would require more research into the actual application attrition rates and content of the tests to be able to say whether the “rigor” in each country was roughly equivalent. Unfortunately, that data was not available for all countries.

Only the Netherlands *Onderofficier* selection process differs appreciably from the other countries’ practices for enlisted (NCO) personnel in that it is similar to officer selection; Germany follows essentially the same selection procedure for all enlisted tracks and simply sends those who do not pass the various NCO exams down to the *Mannschaften*.

In terms of officer selection, the USA is unique in its reliance on universities to do most of the selection work. The other countries all require officer hopefuls to go through a battery of tests and exercises, either at a special testing center or in local recruiting centers. All countries are of course more rigorous with higher-level applicants than with lower level ones, but nearly all have about the same number of potential exit points.

Table 9: Education and Aptitude Testing in Selection

	Importance of Educational Certification in Selection	Aptitude Testing
United Kingdom	Enlisted: Low – no overall minimum, but each specialty has specific minimum qualifications, subject to military discretion Officer: Moderate – overall minimum qualifications for candidacy, university preferred but not required before or after commissioning	Enlisted: yes – pure aptitude test, no overall minimum score, but minimum scores for occupational specialties Officer: no
Ireland	Enlisted: Low – no overall minimum Officer: High – overall minimum qualifications for candidacy, university required after commissioning at the latest	Enlisted: no Officer: yes – aptitude and attitude test, no overall minimum score, scores sometimes used to screen out lowest-ranked
United States	Enlisted: Moderate – overall minimum, some limited military discretion, certification highly variable Officer: Moderate – overall minimum, but within a system where the certification is subject to high variance, low military discretion (university discretion), university required for commissioning	Enlisted: yes – pure aptitude test, overall minimum selection score, helpful in occupational specialty assignment but no official scores for occupational specialty Officer: yes – minimum SAT/ACT scores necessary for all officer entry options, and those entering OCS must also score a minimum 31 on the ASVAB GT section.
Germany	Enlisted: High – overall minimum for two of three tracks, no military discretion, certifications highly specific and standardized Officer: High – overall minimum, very restricted military discretion, certifications highly specific and standardized, university degree required after commissioning in nearly all cases	Enlisted: yes – aptitude and attitude test, no overall minimum score, helpful in occupational specialty assignment Officer: yes – aptitude and attitude test, no overall minimum score, helpful in occupational specialty assignment, used in rankings
Netherlands	Enlisted: High – overall minimum for both tracks, no military discretion, certifications highly specific and standardized Officer: Moderate – two possible minimum values, with different contract possibilities associated with each, no military discretion, certifications highly specific and standardized, university preferred but not required	Enlisted: yes – primarily attitude test with some aptitudinal questions, no overall minimum score, helpful in occupational specialty assignment Officer: yes - primarily attitude test with some aptitudinal questions, no overall minimum score, helpful in occupational specialty assignment, used in rankings

Table 10: Education and Points of Entry

	UK	Ireland	USA	Germany	Netherlands
No certification	Enlisted lowest rank (restricted jobs)	Enlisted lowest rank	No entry	<i>Mannschaften</i> lowest rank	<i>Manschappen</i> lowest rank (with aptitude test)
Lowest secondary certification (Hauptschulabschluss/ VMBO/O-levels/Junior Cert)	Enlisted lowest rank	Enlisted lowest rank	Enlisted lowest rank (GED – limited entry with high AFQT)	<i>Fachunteroffizieranwärter</i> (lowest rank of <i>Fachunteroffizier</i> : candidate)	<i>Manschappen</i> lowest rank
Lowest cert + vocational training (Hauptschulabschluss + Berufsabschluss/ MBO)	Enlisted lowest rank	Enlisted lowest rank	Enlisted up to E-4 in the Army	(<i>Fach</i>) <i>unteroffizier</i> (also <i>Feldwebelanwärter</i> – lowest rank of <i>Feldwebel</i> : candidate)	<i>Onderofficier</i> lowest rank (assuming that the degree is in a particular field of interest to the military)
Intermediate certification (Realschulabschluss/ HAVO)	NA	NA	NA	<i>Feldwebelanwärter</i>	<i>Onderofficier/ Officer cadet</i> (short model only)
Intermediate cert + vocational training (Realschulabschluss+ Berufsabschluss/ HBO)	NA	NA	NA	<i>Stabsunteroffizier</i> (also <i>Feldwebelanwärter</i>)	<i>Onderofficier</i> (Sergeant)/ <i>Officer cadet</i> (long or short model)/ <i>Eerste Luitenant</i> possible for some specialties

Highest certification (Abitur/VWO/A-levels/ Leaving Cert/high school diploma)	Officer cadet	Officer cadet (commissioned as 2 nd Lt. /Ensign)	Enlisted/Officer cadet (commissioned as 2 nd Lt./E2-4 with certain ed. and non-ed. Qualifications)	<i>Offizieranwärter</i> (officer candidate) commissioned as <i>Leutnant</i>	Officer cadet (short, long, or post-academic model possible)
Post-secondary (academic) degree (university/FHS)	Officer cadet	Officer cadet (commissioned as Lt./ Sub-Lt.)	Officer cadet	<i>Offizieranwärter</i> (officer candidate) commissioned as <i>Hauptmann</i>	Officer cadet (commissioned as <i>Kapitein</i>)
Professional/Post-graduate degree	Officer cadet (doctors, dentists, registered nurses w/ 2 yrs experience, barristers, solicitors, veterinarians, chaplains (padres) commissioned as 1 st Lt or Captain)	Officer cadet (any degree commissioned as Lieutenant; medical and dental officers commissioned as Captain) (Defence Forces Regs A.15)	Officer cadet ("Direct Commission") (doctors, dentists, veterinarians, registered nurses, lawyers, and chaplains commissioned as 1 st Lt or Captain)	<i>Offizieranwärter</i> (officer candidate) - any degree specifically needed by the <i>Bundeswehr</i> commissioned as Major	Officer cadet (commissioned as <i>Kapitein</i>)

Note: the literature published by the *Bundeswehr (Feldwebel des Truppendienstes)* is inconsistent with the SLV, which says that people can enter the Feldwebel track at higher ranks – however, those higher ranks are only within the training scheme (i.e. unteroffizier/stabsunteroffizier).

Table 11: Selection Processes

	United Kingdom	Ireland	USA	Germany	Netherlands
Enlisted	1. Application* 2. BARB (aptitude test) 3. Occupation Interview (recruiter)* 4. Physical fitness test 5. Medical exam* 6. Background check*	1. Application* 2. Interview (board)* letters of reference 3. Physical fitness test* 4. Medical exam* 5. Background check*	1. Application* 2. Interview (recruiter)* 3. ASVAB* 4. Physical fitness test 5. Medical exam* 6. Background check*	<i>Mannschaften</i> 1. Application* 2. Aptitude test 3. Interview (recruiter)* 4. Physical fitness test 5. Medical exam* 6. Background check*	<i>Manschappen</i> 1. Application* 2. Interview (recruiter)* 3. Psychometric tests* 4. Physical fitness test* 5. Medical exam* 6. Background check*
				<i>Fachunteroffizier</i> Applicant Status 1. Application* 2. Aptitude test 3. Interview (recruiter)* 4. Physical fitness test* 5. Medical exam* 6. Background check* Candidate Status 7. Training 8. <i>Unteroffizier</i> exam* (back to Mann.)	<i>Onderofficier</i> 1. Application* 2. Interview (recruiter)* 3. Psychometric tests* 4. Physical fitness test* 5. Interview with Planning Office* 6. Unit/training center visit 7. KMS visit 8. Interview with AAC* 9. Medical exam* 10. Background check*
				<i>Feldweibel</i> Applicant Status 1. Application* 2. Aptitude test 3. Interview (recruiter)* 4. Physical fitness test* 5. Medical exam* 6. Background check*	

				Candidate Status 7. Training 8. <i>Unteroffizier</i> exam* (back to Mann.) 9. Training 10. <i>Feldwebel</i> exam* (back to Mann.)	
Officer	Applicant Status 1. Application* 2. AOSB Briefing* AOSB (3 days) 3. group discussions 4. planning exercises 5. problem-solving exercises 6. physical fitness test 7. medical exam* 8. individual interview* 10. Background check* Cadet Status 11. Sandhurst (44 weeks)* Commission	Applicant Status 1. Application* 2. Interview 3. Police background check* 4. Physical fitness test* 5. Psychometric testing 6. Group assessment* 7. Job review 8. Medical exam* 9. Final Board Interview* Cadet Status 10. Cadet School (15 months)* Commission University studies	Applicant Status 1. Application* 2. University application* 3. Aptitude Test (SAT/ACT) 4. Interview (cadre/board)* 5. Physical fitness test 6. ASVAB (OCS only)* 7. Medical exam* 8. Security clearance* Cadet Status 9. University studies* 10. Military training * Commission	Applicant Status 1. Application* OPZ (2 days) 2. essay 3. aptitude/attitude test* 4. individual interview* 5. group situational test 6. university studies interview* 7. medical exam* 8. physical fitness test* Cadet Status 9. Basic and specialty training* Commission Unit experience University studies*	Applicant Status 1. Information day at KMA 2. Application* 3. Interview (recruiter)* IKS (1-2 days) 4. Psychometric tests 5. Physical fitness test* 6. Interview with Planning Office* 7. Interview with AAC* 8. Medical exam* 9. Background check* Cadet Status/Commission OKM – 1.5 yr KMA course OLM – 4 yr KMA course OPA – 2 yr KMA course

A * indicates a point of out-selection

4. Occupational Specialty Assignment

The last chapter emphasized the importance of a country's educational system for the character of military selection and accessions, but also hinted at another important issue: vocational training. In this chapter, I explore the links between the way specialized skills are acquired and viewed in a country's economy, and the way that military occupational specialty assignment and training are carried out. Based on the theory outlined in Chapter 2, I hypothesize that militaries in Continental Coordinated Market Economies are more likely to give an individual a guaranteed military occupational specialty before he or she has incurred a service obligation, and that the individual's preference will play a larger role in occupational specialty assignment in CCME militaries. By the same token, I expect LME militaries to be less concerned with occupational guarantees and more likely to have the organization rather than the individual choose the specialty. I also expect, however, that LME militaries will be more likely to have market-driven assignment practices, which might include offering guarantees to attract recruits. I hypothesize further that that CCME militaries are more likely to emphasize the vocational training aspect of military service in recruiting and harmonize their training with civilian credentialing schemes. I expect LME militaries to provide vocational training only to those who will need it for their military service, and to be less likely to have skills training harmonized with civilian credentialing.

Some of these claims may seem obvious and intuitive, but there are plausible alternative explanations which have been implicit in much of the various national literatures on military recruiting. The first is the idea that the real split in human resources management is found between enlisted personnel and officers. Post-World War II practice in CCMEs tends to make less of a distinction between officer and enlisted than in LMEs, and the CCME militaries have more tracks, making the enlisted-officer distinction harder to maintain. Nonetheless, practice regarding officers and enlisted may differ. The test for my theory will be whether that cleavage explains more than the LME-CCME economic context variable.

Another popular and plausible alternative explanation is that occupational specialty assignment practices ought to be market driven. Most classical economists would expect this to be a bargaining chip in the contracting process. The employer needs certain functions fulfilled, and will prefer to be allowed to assign employees where it needs them. The employee on the other hand will prefer the highest possible level of influence over the type of work he is to do. If the employer is in a very strong position, he can essentially assign the employee to whatever occupation needs to be filled. If the employee is in a strong position, he can withhold his labor unless he is given some say in the assignment. Given that market conditions are likely to fluctuate, it would not make sense to guarantee the choice either to the employer or the employee, as that would interfere with efficiency. This line of argument would therefore predict that

practices within countries would change over time with the difficulty or ease of recruiting (going from an extreme of employer-determined assignment to an extreme of co-determination rights), and that there would be no clear cross-national pattern.

If, however, control over the choice of occupational specialty had a fixed rather than a variable value (or if its value relative to labor/job were constant), it might make sense to have a guarantee. I argue here that in a CCME context, the value to the employee of choosing his or her own occupation is in effect fixed very high relative to the value of having a job, because it is so difficult to get out of an occupational track once one is in it. I therefore expect CCME militaries to guarantee the applicant negotiation rights.

To summarize, the main hypotheses were:

OS1: CCME militaries are more likely to feature a contracting process which allows the applicant to choose his occupational specialty before committing to the organization, while LME militaries are more likely to have a flexible, market-based approach to specialty assignment.

OS2: CCME militaries, in a context of high certification standardization and high skills importance, will exhibit a high level of effort to coordinate their training and education with civilian schemes.

OS2a: LME militaries, in a context of low to moderate-high certification standardization and low skills importance, will exhibit low to moderate effort to coordinate (varying with the level of standardization).

OS3: CCME militaries will offer occupational skills training to all military personnel with at least a medium-term contract; LME militaries will provide occupational skills training only to those personnel expected to carry out such occupations within the military.

The alternative hypotheses were:

OS4: enlisted personnel will be guaranteed occupational specialties before obligating themselves to service, and will have more choice in the matter. Officers will not be guaranteed specialties, and their specialty assignment will be largely up to the organization.

OS5: specialty assignment practices will vary with the ease or difficulty of recruiting – the more difficult recruiting becomes, the more concessions the organization will make to the potential recruit.¹

¹ In this project, I do only a preliminary test of this alternative hypothesis. The main reason for this is, as mentioned elsewhere, the lack of longer-term data on the ratios of target to actual recruits, and the almost entire lack of data allowing a measure of “quality” recruits. The other reason is that, while the ease of recruiting has certainly fluctuated over the last fifteen years, only the USA has seen its policies change. This indicates that, if there is a connection between ease of recruiting and assignment policy in the other countries under study at all, it would require a long period of data including both major and minor cycles of recruiting difficulty to establish how much difficulty is sufficient to cause a change in policy.

Overall, the theory is well supported. Although the hypothesis on LME military occupational specialty assignment practice was not supported in all observations, only one contradictory finding was truly a contradiction (the long-standing practice of the British Army with respect to enlisted personnel). Furthermore, the flexibility expected of LME militaries may allow other factors such as socio-economic roles or market pressures to play a greater role than they can in CCMEs. The hypotheses on training are well supported, and it is significant that, while both Germany and the Netherlands offer structured vocational skills training (leading to full certification) even to soldiers whose military occupational specialty is not vocational (e.g. infantry), the LME militaries do not.² The alternative hypotheses received some support, but in a way that indicates that they come into play only if occupational skill is not a primary labor market criterion. In other words, market economic type appears to be a primary variable for both specialty assignment practices and harmonization with civilian training schemes.

4.1 Vocational Training and Skills Certification

This section gives a brief overview of the differences in vocational training and skills certification between Liberal and Continental Coordinated Market Economies, but it should not be taken as comprehensive. Not only are vocational training systems complex, they are also more sensitive to economic fluctuations than the school system,

² See below on Ireland: any soldier in the Irish Army can apply for vocational type training, but such courses would not be the equivalent of a “*Berufsausbildung*” in Germany, and the soldier’s opportunity to attend such training is contingent rather than guaranteed.

and thus more liable to frequent reform. One important note regarding the discussion of “apprenticeships” is that, if “apprenticeship” is defined as a vocational training experience which combines a significant component of practical firm-based work experience with school-based learning, then all five of the countries under study do in fact have apprenticeship arrangements available. The main differences between the CCMEs and LMEs under examination here are the range of occupations where an apprenticeship arrangement is available and the proportion of a given youth cohort taking part in such arrangements. In the LMEs, apprenticeships tend to be restricted to very technical or craft occupations and tend to attract very small numbers of school leavers. In the CCMEs, apprenticeship arrangements are available for nearly all occupations which do not actually require university study (including e.g. sales and clerical work), and a majority of school leavers are to be found in vocational training as opposed to academic post-secondary education.

In Liberal Market Economies such as the United Kingdom, Ireland, and the United States, initial vocational training tends to take place in modular form at the same secondary schools where academic training is taking place.³ These schools will offer classes in various types of vocational skills, and those pursuing an academic future are

³ In the United Kingdom, it is possible to do the GNVQs/BTEC qualifications at a comprehensive school, but many students who wish to sit for examinations in vocational subjects go instead to colleges of further education (CFEs). These colleges serve both as a sixth form college for those doing vocational leaving cert exams, and as a place for adults and post-secondary students to acquire vocational skills.

normally free to take vocational courses if they wish. Pupils who prefer to enter the vocational labor market have the option of concentrating on the vocational courses while fulfilling core academic requirements.⁴

Most formal vocational training, however, actually takes place in post-secondary educational institutions such as community and technical colleges (USA, Ireland), and colleges of further education (UK). There is some education-industry coordination, but it is usually not nationally organized or regulated. In the United Kingdom and Ireland, there are national agencies which regulate vocational training curricula. These are also often the accrediting body, but not always. In the United States, certification is done by a huge range of government and non-government entities, and is helpful but often optional on the job market. Licensing, on the other hand, is nearly always done by government bodies (such as state governments) and is usually required for the practice of professions. In short, the secondary-level vocational training systems, like the educational systems, are unstandardized in the USA and somewhat more standardized in the UK and Ireland, but in all cases they tend to serve a small minority of students. Leaving certificates from such programs often qualify their holders for study at a normal university, and certainly for courses at further education/community colleges.

⁴ Usually English, Mathematics, Science, and History requirements, sometimes also foreign language requirements.

In the Coordinated Market Economies of Germany and the Netherlands, on the other hand, vocational training is far more highly regulated, far more intensive and concentrated, and certification is far more important on the job market. Initial vocational training takes place as the main component of the curriculum in lower secondary school tracks (*Hauptschule* and *Realschule* in Germany, VMBO and – to a lesser extent – HAVO in the Netherlands). Leaving certificates from these tracks then lead either directly into a form of school-based post-secondary vocational education or allow access to competition for apprenticeships. They do not qualify their holders for study at a university.⁵

Business-based post-secondary vocational training, although not the norm in every Coordinated Market Economy, is characteristic of both the German and the Dutch systems. Nearly all CCMEs rely on close cooperative relationships between businesses and vocational schools to place school leavers, and business associations may even play a part in curriculum development for vocational training. Businesses benefit from the additional information about potential employees they get from these relationships, and the state benefits by lowering youth unemployment (Auer 2000, 118ff.). Credentialing is done through the national system of school leaving certificates, post-secondary

⁵ Note that a *Realschulabschluss* does qualify its holder for study at a *Fachhochschule*, which is not considered equivalent to academic universities, but which is sometimes translated as a “University of Applied Sciences”. Neither the *Realschulabschluss* nor the *Fachhochschulreife* qualifies its holder to attend an *Universität*. In the Netherlands, by the same token, a young person who has completed HAVO and gone on to HBO can then move to an academic university, but only after completing something beyond just the HAVO leaving certificate.

diplomas, and state- or chamber-administered examinations upon the completion of apprenticeships. Coordinated Market Economies thus enjoy forms of certification for vocational training which can be recognized and understood by every employer and by every employee. This means among other things that employees in CCMEs ought to have stronger preferences about the skills they want to develop, and thus that skills training should be a more important recruiting tool for them and a more salient aspect of their contracts.

The next sections will provide details of the vocational education systems in the United Kingdom, Ireland, the USA, Germany, and the Netherlands, as well as how skills certification is regulated, and how militaries carry out occupational specialty assignment and skills training.

4.2 Liberal Market Economies

4.2.1 The United Kingdom

4.2.1.1 Vocational Education and Skills Certification

In the United Kingdom, there are two levels of vocational certification in secondary school. The General National Vocational Qualification (GNVQ) can be obtained by those leaving school at the minimum school-leaving age of 16, and is

equivalent in level with the GSCE.⁶ It is acquired by taking more vocational courses than usual and by testing in those courses rather than academic ones. Pupils who continue school to age 18 can sit exams for the Advanced Vocational Certification of Education (AVCE or VCE A-level), which is the vocational equivalent to the GCE A-level and better than the GCE AS-level. These certifications depend entirely upon the student's chosen course of study and the exams he or she chooses to sit on school-leaving. Although the vocational training received always includes hands-on training, it takes place exclusively in a school environment.

There are institutions of further and/or higher education where young people can acquire certifications in most technical and applied occupational skills, but these are subject to fees and availability. There is a single body – the Qualifications, Curriculum, and Assessment Authority – governing curricula, examinations, and skills qualifications for England, Wales, and Northern Ireland,⁷ and another for Scotland. Saying there is one regulatory body is somewhat misleading, however, as these are really umbrella organizations which simply oversee and coordinate the multiple bodies which are directly responsible for awarding skills certifications. They do not appear to have the

⁶ The GNVQ will be phased out by the end of 2007 (see http://www.qca.org.uk/downloads/qca_05_1945_qnvq_succ_web.pdf) and replaced by other types of certifications, but this will not change the general structure of the system.

⁷ Technically, each country has its own curriculum and skills authority, but those in Northern Ireland (Council for the Curriculum, Examinations and Assessment in Northern Ireland – CCEA) and Wales (the Qualifications, Curriculum, and Assessment Authority for Wales – ACCAC) tend to work very closely with the Qualifications and Curriculum Authority, while the Scottish body (the Scottish Qualifications Authority – SQA) remains a bit more independent.

ability to sanction non-compliance directly. The primary purpose of these umbrella organizations is to establish a reliable standard which will maintain both real skill levels and the confidence of the business community and the public, and to report on the compliance of certifying bodies. The largest certificate-awarding body in the United Kingdom is Edexcel, which administers the BTEC (Business and Technology Education Council) vocational qualifications which are replacing GNVQs. Through its size and history, Edexcel is approaching the status of a national accreditation body, but as of January 2007 it remains one among many.

Vocational training is thus nationally certified at the secondary school level, but not particularly intensive. Intensive formal training generally takes place in post-secondary schools and colleges, and learning-by-doing on the job is expected by most employers (for an overview, see Finegold and Soskice 1988). Accreditation is administered by a large and diverse number of actors, but overseen by a national regulatory body, the QCA (SQA in Scotland). There is thus a moderate level of standardization in skills certification. According to the hypotheses, we should expect the British military not to guarantee occupational specialty before contracting, low to moderate military coordination with civilian certification bodies, and occupational skills training only per military necessity.

4.2.1.2 Military Occupational Specialty Assignments and Training

The last chapter touched upon occupational specialty assignments as a part of the process of selection and accessions. In the British Army, a person wishing to enlist first takes the BARB aptitude test, and is then presented with a list of specific jobs within the service for which he or she is qualified by test score. The recruiter must check the applicant's educational qualifications, as many occupations have minimum leaving certificate requirements, and the recruiter must also check with the central database to see what jobs are currently or soon available. In this interactive sense, then, the applicant chooses his or her occupational specialty and specific job, before he or she is in any way committed to service. This being said, that assignment is subject to confirmation from the branch Senior Personnel Selection Officer during basic training. Trade training is received within the military in the context of branch and corps assignment.

For officers, the process is somewhat different. Officer hopefuls discuss their career ambitions with recruiting officers, and they must usually visit a unit of their preferred occupational specialty (e.g. the Royal Engineers) and obtain a sponsorship from that unit in order to attend the Army Officer Selection Board (AOSB). Although this sponsorship is considered a gentlemen's agreement that the sponsoring unit will take the cadet upon commissioning, many cadets change their minds in the course of their training at Sandhurst, and the actual specialty assignment takes place at a sort of career fair at the end of the second 14-week term. At this point, the cadets are already

obligated to service for at least three years, and their preferred unit may not want them or have places for them. Officers who do not receive their preferred assignment do not have significant options for redress.

Since around 1996, the British Army has been trying to harmonize its certification procedures with civilian standards, and has been building relationships with civilian training and education centers, awarding bodies, and professional organizations. For vocational skills, this coordination work is handled by each service branch or specialty (“cap-badge”): a designated liaison seeks out civilian bodies with skills related to the branch’s skills set and works with them to keep military training abreast of new developments and to get civilian recognition for military training. Enlisted soldiers have access to a number of career and personal development education and training opportunities. The Command, Leadership, and Management (CLM) courses are aimed at developing these general human capital skills, and the Directorate of Education and Training Services (Army) (DETS(A)) states that these skills and qualifications are accredited and therefore recognized by civilian employers.⁸ The Army encourages soldiers to invest in training for personal development purposes, and does not require that this training be related to a soldier’s occupational specialty. The DETS(A) also provides a Personal Development Record to help soldiers keep track of the training they have done and the qualifications they have earned, in order to improve their career

⁸ http://www.army.mod.uk/dets_a/professional_development/soldiers.htm

preparation for post-Army life. Officers also have access to a range of personal and professional development courses (http://www.army.mod.uk/dets_a/index.htm).

In addition to the Army sixth form college at Welbeck,⁹ the Army runs an Army Foundation College at Harrogate, which is open to youth between the ages of 16 and 17-and-one-month (i.e. too young to enlist). It is a school-based vocational training center, but its primary orientation and purpose is military. Attendees usually go because they want to join the military but are still too young, and the vocational training is an added incentive. The college accepts applicants regardless of whether they have school qualifications (GCSEs) or not, and trains them in information technology, mathematics, and English, as well as vocationally-related skills such as “working with others”. Those who are assigned to an engineering branch (branch choices are finalized between weeks 15 and 21) will also do more specific technical training. Students acquire GNVQs, but are not prepared for a specific vocation; the majority of their training is military and the vocational training is basic and applicable to multiple occupations.¹⁰

In sum, contra OS1 and in accord with alternative hypothesis OS4 about guaranteed specialties, British enlisted personnel do generally enjoy a high degree of both choice and certainty about their occupational specialties before they sign a contract of service. Their preferences are limited only by their qualifications and aptitude; even

⁹ This is a highly competitive sixth form college for young people interested in engineering and other hard sciences who want to consider a career in the Army.

¹⁰ See <http://www.army.mod.uk/afc/index.htm>

the lack of a training place can sometimes be accommodated by delaying the start of training. Officers have somewhat less choice and certainty (supporting OS1 and OS4). With the sponsorship arrangement, they at least have a good chance of being accepted into a specialty and unit in which they are interested, but it is usually up to the service corps itself whether to accept the cadet as an officer.

Hypothesis OS2a, regarding coordination with national-level civilian agencies, is moderately well supported. The Army's apprentice-type programs do utilize the national vocational certification scheme. The organization goes beyond coordination with national agencies, however, by delegating specific coordination to the various service corps. This allows the Army to achieve a relatively high level of coordination despite the moderate level of standardization in the civilian realm. Two notes, however, are in order. First, the diversity present in the civilian sector makes the Army's job more difficult. There are still a number of gaps between military training and civilian certification. Second, and perhaps more interesting, is that the information the British Army makes available on education and training (through its publications and websites) refers exclusively to general human capital skills and some special skills (such as languages) which are not related to a particular occupation. The Command, Leadership, and Management courses are a case in point: when the Army literature refers to career advancement training or further education, it is usually referring to the CLM courses. These are all non-occupation-specific. The Army appears to take for granted that

vocational/occupational skills training will be appropriate to the branch assignment, and will be helpful on the outside, but that work experience and training in general skills are the best guarantors of competitiveness on the post-Army market. This is consistent with hypothesis OS3, and with my expectation that LMEs will emphasize the general skills benefits of military service.

British assignment practices have not varied much since around 1994 (when the BARB was introduced in its present form), while ease of recruiting certainly has (interview with Major Robert Hambly 17 July 2006). This contradicts alternative hypothesis OS5.

4.2.2 Ireland

4.2.2.1 Vocational Education and Skills Certification

The vocational training system in Ireland is also a largely school-based system with vocational modules (see e.g. Auer 2000, 119). Although there is no specific vocational certificate available to those leaving secondary school at 16 (Junior Cycle), there are so-called vocational schools, which offer more vocational subjects than a normal secondary school, along with the full range of secondary subjects.¹¹ Irish school

¹¹ These schools educate about 29% of secondary level students in Ireland. However, because these schools offer non-vocational leaving certificate courses as well as vocational, that cannot be taken as an indication of how many students are actually pursuing a primarily vocational education (see the website of the International Education Board: <http://www.educationireland.ie/httpdocs/htm/secondary/sintro.html>). One expert estimated the percentage of Irish students following vocational education and training at around 20%

leaving certificates (like British ones) are made up of final examinations in a certain number of subjects. This means that it is possible to take both Junior Cert and Leaving Cert examinations in vocational subjects, thereby providing potential employers with information about students' capabilities in the subjects in which they chose to sit exams.

Those staying on to 18 (Senior Cycle) can choose to do the Leaving Certificate Vocational, which is described by the Department of Education and Science as being "a[n] [Established] Leaving Certificate with a strong vocational component"¹² (see also Gleeson 1998, 61). As in Britain, most vocational education is hands-on but school-based, and the most intensive training happens in post-secondary further education institutions. The vocational schools are run by local Vocational Education Committees but lead to nationally recognized leaving certificates, administered by the Department of Education and Science. The National Qualifications Authority Ireland (NQAI) oversees a number of bodies tasked with curriculum and training standards and accreditation at the secondary level. Most national certification at the post-secondary level is overseen by the Further Education and Training Awards Council (FETAC), although there are a number of bodies which offer training. The apprenticeship system serves only a very

(Gleeson 1998, 56). The same expert noted that although the percentage of students pursuing VET in secondary school was far lower in Ireland than in most other European countries, the number of young people attending post-secondary vocational training was rising (ibid.).

¹²<http://www.education.ie/home/home.jsp?maincat=22823&pcategory=20650&ecategory=20658§ionpage=12251&language=EN&link=link001&page=1&doc=18628>

small percentage (around 5%) of a given cohort of labor market entrants (Breen et al. 1995, 61; Hannan et al. 1998, 5).

Since Ireland is classed as an LME, we should expect that people are not guaranteed an occupational specialty upon contracting. However, its vocational training system is somewhat more organized than that in the United Kingdom (facilitated of course by Ireland's small population and the absence of semi-independent political sub-units). This is especially true in terms of the standardization of certification, although this does not translate to a much greater role for skills certification on the job market. This leads us to expect a moderate level of harmonization between military training and civilian certification. Because certification is relatively well standardized, we should expect the military to use it as a salient reference. A potential alternative explanation would lead us to expect enlisted personnel but not officers to be guaranteed a specialty of their own choosing. It may also be the case that assignment practices will vary over time or across regions to address differing recruiting needs.

4.2.2.2 Occupational Specialty Assignments and Training¹³

Due to its small size, the Irish Army is not as concerned with occupational specialization as the other militaries under study. The Irish model is similar to that of the

¹³ This section was composed primarily on the basis of interviews and personal correspondence with Cmdt. Gerry Cooney, Captain Caoímin Keane, and LtCmdr Eamonn Lucey, Irish Defence Forces. Supplementary information came from IDF publications (Defence Forces Regulations and Administrative Instructions) and websites.

U.S. Marine Corps, where “every Marine a rifleman” is the credo; in the Irish Army, people must be ready to fill jobs as needed. The Army is organized along both geographical and branch specialty lines. It consists of three Brigades: Eastern, Western, and Southern, and is divided into Service Corps, e.g. Infantry or Military Police.¹⁴ Each Brigade has approximately the same organizational make-up, but as recruiting is done geographically, their personnel strengths, skills distributions, and age profiles may differ appreciably.

Those enlisting in the army nearly always sign a contract for “general service”, even if they are bringing special skills with them.¹⁵ After they have completed basic training, enlistees are asked for two ranked Service Corps preferences, and the assignment decision is made by a Final Assignment Board. The Board will try to take these preferences into account, but the overriding concern is the needs of the service. (DFR A.10. Part II para. 26(3); Admin Instructions A.10. Personnel, Annex L: AF 339; personal correspondence with Cmdt Gerry Cooney, 05 Jan 2007). The Board’s decision is final and there is no form of redress available, although soldiers may request transfers

¹⁴ These are the infantry, artillery, air, cavalry, engineers, signal, ordnance, supply and transport, military police, medical, Army School of Music, and *An Cór Breathnadóirí* (the Observer Corps).

¹⁵ The exceptions are those signing up as Private Apprentices, who are accepted into the Army or Air Corps Apprentice Schools. These schools have specific educational pre-requisites including technical/vocational exams at the Junior Certificate level. Those wishing to sign up for an apprenticeship must be between 17 and 20 years old (22 if currently serving in the PDF); the training itself will take four years, the entire span of which is regarded as probationary, and the individual is obligated to nine years of active service rather than five. The total obligation is still 12 years, however, like all other enlisted personnel. Apprentices are NOT guaranteed appointment to a technical specialty even upon successful completion of training (see pamphlet “Apprenticeships in the Army” issued by the Recruitment and Competitions Office 2006).

once arrived at their units.¹⁶ The “needs of the Army” justification does not extend to assigning soldiers to geographical locations other than the one where they enlisted, indicating that the Army expects most recruits to be more resistant to being stationed far from home than to learning their second or third choice skill.¹⁷

The usual practice is to assign all newly-minted enlisted personnel to so-called “line” units (“line” refers to combat and some combat support units, e.g. infantry, artillery, cavalry) and to transfer some of them to more technical units (e.g. medical, ordnance, engineer) later. It is possible for individuals who already possess technical skills and qualifications to get early transfers from line units to the appropriate technical units, as long as there is a vacancy in the receiving unit.

Officer cadets go through training as enlisted personnel and receive their commissions after 15 months of training. Three months before commissioning, cadets who already possess bachelor’s degrees are asked to submit their first two choices (ranked) of Service Corps. The Director of Human Resources Management Services (DHRMS) considers cadets’ preferences, but assigns them primarily according to the needs

¹⁶ Such requests will be assessed on their merits by the soldiers’ commanding officers, who will then give their recommendations to the General Officer Commanding of each soldier’s Brigade. The GOC usually follows the Commanding Officer’s recommendation.

¹⁷ This may appear strange especially to an American reader, but is in fact the rule rather than the exception in European militaries. They tend to recruit more or less officially on a regional basis, and in both the British and Irish militaries it is impossible to assign an individual to a region other than the one where he enlisted without his permission. Regardless of whether a military is active and expeditionary or not, most service-members expect to be stationed most of the time near their hometowns. In Ireland, this appears to be more important than choice of occupational specialty.

of the Army. His decision is final and there is no possibility of complaint or appeal. Newly commissioned officers who do not yet have bachelor's degrees must choose their preferred courses of study about six months before commissioning, but the course will not usually be definitive for the Service Corps assignment. These cadets also submit their Service Corps preferences and are assigned by D HRMS.

All cadets, regardless of their educational qualifications or chosen courses of study, are commissioned into "line" units and can transfer into other corps later. As with enlisted personnel, officers with special skills (e.g. engineers, scientists) may transfer to an appropriate unit more quickly than those without such skills. Graduate cadets (those with a post-secondary degree) are commissioned as Lieutenants; cadets who have yet to attend university are commissioned as Sub-Lieutenants and will serve for about 16 months in a line unit before doing their courses at university.

Vocational skills training other than corps-specific training is largely self-directed. Because of the lack of specific occupational specialty assignments and the possibility that anyone could be assigned to nearly any job within the unit, there is very little in the way of "required" training or multi-course occupational qualification curricula. That being said, each Service Corps has standards and expectations, and it is well-known to all service-members that if they want to pursue promotion, they must also pursue training. For example, in the Cavalry Corps, a three star private is not considered fully qualified until he has successfully completed an armor driving course, a

gunnery course, and a signals operator course. He is free to take other courses which interest him, such as first aid or language, but more interestingly he is also free to take technical courses such as plumber or mechanic.

If an individual wishes to be promoted to NCO rank, he will have to have completed a number of other courses and exams, primarily focused on military leadership and training skills. Sometimes soldiers will be singled out by their immediate superiors as having particular potential, but most of the training and skills advancement is self-driven. Soldiers must apply for training and will be selected on the basis of psychometric testing (i.e. aptitude and suitability) and interviews. The technical courses are all recognized by civilian trade bodies, because they are certified by Ireland's National Training and Employment Authority (*Foras Áiseanna Saothair* – FÁS).

The Army also has Apprentice Schools, which are also linked into the FÁS's national apprenticeship scheme and are fully recognized (resulting in a National Craft Certificate). Selection for apprenticeships in the Army is quite competitive: there are a very small number of them, and apprenticeship is quite rare in the civilian economy (Auer 2000, 119), so these represent a scarce resource for young people interested in jobs such as Heavy Vehicle Mechanic. Applicants must pass a physical fitness test in order to be considered, and must also have achieved minimum scores on certain exams at at least

the Junior Certificate level.¹⁸ Individuals who are already members of the PDF and who meet all the eligibility criteria are guaranteed an interview for a spot in the schools. Only if a candidate is successful at the interview stage will he/she undergo a background check and a full medical exam. Successful candidates are required to enlist for a total period of twelve years (nine years active and three years reserve). Apprentices will normally be posted directly to the appropriate Service Corps upon successful completion of training when possible, but this is not guaranteed (“Apprenticeships in the Army”, www.military.ie).

Hypothesis OS1, which predicted that individuals joining the Irish Army would not have a guarantee of occupational specialty before signing a service contract, is well supported. This is in part due to the Irish Army’s generally lower level of occupational specialization, but the very fact that it is possible for a person to enter service, serve only in a line unit, and leave service without ever having acquired a particular set of occupational skills, indicates the low significance of specialty training guarantees for recruits in general. Hypothesis OS2a, which predicted a moderate level of effort, is also somewhat well supported. The Irish Army has achieved a moderate level of harmonization with civilian credentialing bodies, due primarily to the standardization of the civilian system. Its effort level is classed as “moderate-low”, however, because

¹⁸ They must have at least a grade C (ordinary) or grade D (higher) on Maths, Irish, and/or English, and at least one of the subjects Metalwork, Materials Technology, Science, Technical Graphics, or Technology. Foundation-level Maths are not acceptable. See pamphlet “Apprenticeships in the Army: Information and Rules”, Dublin: Recruitment and Competitions Office. www.military.ie .

most of the certifications it offers are in very modular format, rather than being organized into career sequences or skills groups which would make sense to a civilian employer. Soldiers have been expected to pursue training at their own initiative and they may or may not follow a specific progression of career-building courses. Thus the ease of coordination allowed the Army to achieve some progress with little effort, but the low significance of defined skill sets on the labor market kept the level of effort down.

Hypothesis OS3 predicted that vocational training would be available only for those individuals slated to perform vocational tasks in the military. It is the case that only those assigned to certain technical corps are likely to have had sufficient training to qualify them for a particular occupation. On the other hand, as mentioned already, modular vocational skills training is available to any service-member who wants it and who can gain access to the course. No service-member is guaranteed vocational training, however, and many of the modules are not occupationally specific. The logic of the hypothesis – that the military does not believe it necessary to guarantee occupational training for service-members who do not have an occupational assignment – holds.

In further circumstantial support of the theory, it is interesting to note that commanding officers are required to provide a testimonial of character *in their personal handwriting* to each enlisted person being discharged from the armed forces. This is specifically with the purpose of aiding those persons in finding civilian employment,

and the Defence Forces Regulations (Part III para 51) are grave and explicit about the importance of accurate character assessments for both the sake of persons receiving such testimonials and for the future attractiveness of military service. Such testimonials of character are accorded far more weight in the individual's transition to civilian life than specific skills certifications.

There is very little difference between the way enlisted personnel and officers are assigned occupational specialties, giving no support to alternative hypothesis OS4 on socio-economic class differences. Furthermore, specialty assignment practice has not changed significantly over the last fifteen years, nor does it vary by region, despite fluctuations in the ease of recruiting. This indicates no support for hypothesis OS5.

4.2.3 The United States

4.2.3.1 Vocational Education and Skills Certification

In the United States, all students completing secondary school satisfactorily receive a high school diploma, which indicates to an employer only that they have met basic national and state requirements for graduation. Employers get more specific information about students from their transcripts, which list all the courses they attended and the grades they achieved. The number and range of vocational training courses available in American high schools varies enormously, and access to such training is not guaranteed. Regardless of the vocational education available, most

American high school students will be required by national standards to take a substantial academic core.

This does not mean, however, that no formal vocational training is available. It is simply concentrated in post-secondary institutions such as community and technical colleges. The majority of vocational and skills training in the United States occurs informally as “on-the-job” training (Allmendinger 1989, 237, 238). Vocational education and training in the USA not as organized and centralized as they are even in other LMEs like Ireland. Betsy Brand (1998) hesitates even to refer to vocational education and training in the United States as a “system”, because that would imply that “federal, state and local entities, education, business and labour all work together with common goals and strategies,” and that is manifestly not the case (137). She also notes that the absence of national standards for content or performance measures is a major barrier to the coordination of various vocational training programs (B. Brand 1998, 138). Laura Dresser and Joel Rogers (1999) note several initiatives in the direction of coordination and national standards taken during the 1990s, but conclude that reform of vocational training in the United States is not flourishing.

Credentialing in the United States could charitably be called “complex” (for an overview, see Garcia 1992; cf. also Hinz 1999, 161). Certification is the process by which an individual proves that he or she has mastered a specific skill, and usually requires a combination of schooling/training, job experience, and an exam. Certification is

generally not required by law (or by the market) to practice a trade. It differs in this sense from licensing: licensing is essentially permission from the state government to practice a certain trade or profession, and there are several occupations which are required by state law to be licensed. Requirements for licensing tend to differ from state to state.¹⁹ Certification in the United States is usually helpful, but not necessary. In general, certification is carried out by professional or trade associations, and it is up to the individual to find out which certifications are appropriate to his or her needs.²⁰ In fact, the Career Info Net (sponsored by the Department of Labor) notes that an individual considering pursuing certification should first find out whether his or her preferred employers recognize and accept that particular certification, and whether the employers are likely to prefer employees with certification over those without.²¹ These questions would be almost absurd in a CCME context, as certifications are highly standardized and – work experience being equal – the only thing in which employers are interested.

¹⁹ See <http://www.careeronestop.org/> : Credentials Center : Licenses

²⁰ Programs in the USA aimed at recognizing work experience for purposes of academic credit actually borrowed heavily from a program that was designed in 1942 by the American Council on Education to help World War II veterans re-integrate into the economy (see e.g. Dyson and Keating 2005, 51). Dyson and Keating also note that “Recognition of Prior Learning in the United States is more likely to be for the purposes of obtaining college credit rather than that of vocational certification, as the drive toward development of industry “competency standards” has only recently gained momentum”.

²¹ http://www.acinet.org/acinet/crl/CRL_RRSearch.aspx?docn=8065

As the USA is a Liberal Market Economy, Hypothesis OS1 leads us to expect that occupational specialty will not be guaranteed upon entry and that individual preferences will not be the deciding factor. Given the extremely complex and decentralized nature of credentialing processes, and the less than obvious job-market value of certification, Hypothesis OS2a indicates that we should not expect to see much harmonization or coordination between the military and civilian credentialing organizations. Hypothesis OS3 indicates that vocational training in the US military should be associated only with vocational occupational specialties. Individual classes may be available to service-members, but on a competitive rather than guaranteed basis. The alternative explanation of class differences would predict a difference between the way enlisted and officers are assigned a specialty, and a recruiting-market focus would predict changes over time.

4.2.3.2 Occupational Specialty Assignments and Training

The U.S. Army has a comprehensive website allowing those interested in joining a chance to explore the different job opportunities available to them (www.goarmy.com : Careers and Jobs). For enlisted personnel, the U.S. Army is organized into Career Management Fields (CMFs),²² most of which are the familiar “branches” like infantry or signals, but a few of which are special categories such as mechanics. Within each CMF

²² The Marine Corps uses the same official terminology as the Army but tends to call CMFs “programs” or “fields”; the Navy uses naval ratings and the Navy Enlisted Classification (NEC) system, and Air Force has Air Force Specialty Codes (AFSC).

there are several Military Occupational Specialties (MOSs), many of which correspond directly to jobs or occupational specialties in the civilian sector (see Appendix C for a list of US Army CMFs and MOSs). The USA has the most market-driven model of enlistment contracting and specialty assignment, i.e. the most flexible. During times of low demand and high supply, the Army maintains a high level of control over occupational specialty assignment and there is no opportunity for appeal. The Army, however, has not found itself in such a situation for some time. More often, it has been the case that high quality (high AFQT score) recruits and people who brought special skills could bargain for an MOS guarantee before they signed any papers.²³ This has been true especially when the Army (or the Marine Corps) is short on people in a particular MOS: if an individual who seems well-suited to that MOS expresses interest, the recruiter can often guarantee assignment.

The Marine Corps provides an interesting comparison to the US Army. While they are to a certain extent recruiting from the same pool, the Marine Corps is a much smaller organization and is thus able to be somewhat more selective than the Army. For a long time, moreover, the Marines have emphasized the aspects of service and group identity over those of skills and self-realization, which tend to be the Army's recruiting lines. The Marine Corps recruiting philosophy is based around the uniqueness and attractiveness of meaningful service with an elite group. It is "see if you can be one of

²³ This is also a situation where the Army might offer elevated rank to attract a recruit.

us” rather than “see what we can do for you”. Recruiters can offer an attractive recruit a guaranteed field, if that will make the difference for him, but not a particular job (e.g. they can guarantee that he will be a mechanic, but not whether he will be a truck mechanic vs an aircraft mechanic).

Since approximately the end of 2005, the Army has made it normal practice to guarantee a recruit’s MOS before he or she goes to a Military Entrance Processing Station (MEPS). The current procedure is very similar to that for British enlisted, where an applicant’s score on the ASVAB produces a list of the specific MOSs for which he or she would be eligible, and the applicant him- or herself, in conjunction with the recruiter, chooses a specialty (interview with Sergeant Braga, 23 Jan 2007). Marine Corps practice still guarantees fields only if it is necessary to close a deal with a potential recruit.

Officer candidates have far less opportunity for a guarantee in their occupational assignments than do enlisted personnel. At West Point and in ROTC, the individual incurs an obligation of service with the scholarship, but usually does not get assigned a branch until his or her fourth and final year of training. Even then, the cadet cannot simply choose his or her preferred branch. Generally, cadets are ranked by their achievements in training, and a board considers their education, their preferences, and their rankings. As far as it is compatible with the needs of the Army and the availability

of spots, those with higher rankings are more likely to get their top choices of assignments.

At Officer Candidate School, non-prior-service individuals attending will usually be informed about their branch sometime in the first few weeks of training. They are assigned a branch by the OCS board, which reviews their files, education, and preferences, but makes its final assignment based on the primary criterion of the Army's need to fill certain jobs. Prior-service personnel attending OCS will receive their branch assignments at the same time as their notification of acceptance to OCS.²⁴ In general, occupational specialty assignment for officers happens well after the service obligation has been incurred, and is not guaranteed to correspond either to the individual's preferences or his or her major course of study. There is no avenue of appeal.

The Army "Credentialing Opportunities On-Line" website (www.cool.army.mil) is a helpful guide to which civilian certifications one can get through the military and what the potential gaps between military training and civilian certification requirements are.²⁵ Furthermore, there are several options for the enlisted person to get the military to cover part or all of the cost of acquiring civilian credentials. The Department of Defense also has an organization called DANTES (Defense Activity for Non-Traditional

²⁴ See <http://www.armyocs.com/portal/index.php> : FAQs : Application, Selection, and Accessions.

²⁵ It is perhaps interesting to note that the licensing, training, and credentialing guidance for service-members who are transitioning to the civilian labor market is far better organized and more intuitively presented than the information one finds through the US Department of Labor directly.

Education Support), which works with credentialing agencies to offer examinations which will award military personnel civilian-recognized credentials. The US armed forces have been working with the American Council on Education since shortly after World War II to get service-members' training and experience recognized for the purposes of academic credit. This collaboration with the ACE was in many ways a model for programs to recognize prior learning and experience in the United States, but primarily for purposes of higher education rather than the labor market (this was also the case in the United Kingdom. See Scholten and Teuwsen 2001, 28ff. and 44ff.). The cooperation with the ACE also does not imply that any institute of higher education in the USA is required to recognize experience or non-academic training for credit; that is left to the institutional prerogative (see e.g. Scholten and Teuwsen 2001, 37). Not until the late 1990s did some professional associations (architects, nurses, dieticians) start using some of the ACE guidelines and practices to recognize non-formal learning (Scholten and Teuwsen 2001, 41).

Basic training includes some skills which are recognized in the civilian sector, such as self-defense/martial arts basic qualification and swim qualification, but these are not occupationally specific. There are a few military occupational specialties which require individuals to acquire a civilian credential (e.g. Medical Specialists must get Emergency Medical Technician certification). Most occupational specialties, however, will not provide the individual with an actual civilian credential, although the training

the soldier receives may be essentially identical to the most common civilian training requirements.

In order to facilitate the recognition of military training, education, and work experience in the civilian world, the Army provides both a detailed transcript of all military training and education received by the soldier, and a “Verification of Military Experience and Training” form (DD Form 2586), which “lists military job experience and training history, recommended college credit information, and civilian equivalent job titles”.²⁶ The purpose of these forms and of the website is to help enlisted personnel know what credentials they need for civilian jobs related to their MOSs or for college credit, how to get them, how to pay for them, and how to get their training recognized. However, recognition of military experience and training is always up to the state, school, or business/trade body which administers the certifications, credits, and licenses, and ultimately up to the employer. There is no guarantee that any of these will recognize military training and experience. The Army does have a special program it calls Partnership for Youth Success (PaYS), whereby the Army maintains relationships with a number of companies.²⁷ This program actually allows recruits to identify a preferred company and job at the time of enlistment, and subject to the service-member’s achieving and maintaining eligibility for the job, he or she is guaranteed an interview

²⁶ https://www.cool.army.mil/credentialing_basics.htm

²⁷ See <http://www.goarmy.com/pays/index.jsp>

and priority consideration upon completion of military service. This is the only program in which the businesses have agreed before-hand to recognize and credit the soldier's service.

For officers, the question of transferability or civilian recognition is different. Officers always have at least a bachelor's degree, and many may have higher degrees from civilian universities. All of the service academies are accredited and award Bachelor of Science (and in some cases Bachelor of Arts) degrees exactly equivalent to civilian universities. Many of the types of jobs for which officers would be qualified in civilian life must be licensed at the state level in the United States, which nearly always involves an exam and a fee (this is true e.g. for medical doctors, dentists, engineers, accountants, lawyers, etc.). By definition, the military cannot provide state licensing, so anyone leaving the service will have to establish him- or herself in a particular state, but he/she will usually not need a great deal of additional training.²⁸ Officers who were in non-transferable combat arms specialties do have the highly transferable skills of management and planning, and this is widely recognized in the civilian labor market, although it cannot be certified. Most employers in the American private and public sectors recognize military experience – especially officer experience – as valuable in and of itself, for the discipline, responsibility, and problem-solving skills it usually delivers.

²⁸ The major exception to this is lawyers, since they must learn state law in order to pass the state bar exam.

Table 12: Summary of LME Occupational Specialty Hypotheses and Results

		Expected		Actual	Results
MOS Assignment: Enlisted	UK	OS1 – No choice, no guarantee	OS4 – Choice guaranteed before obligation	Choice guaranteed before obligation	OS1 not supported, OS4 supported
	IRL	OS1 – No choice, no guarantee	OS4 – Choice guaranteed before obligation	No choice, no guarantee	OS1 supported, OS4 not supported
	USA	OS1 – No choice, no guarantee	OS4 – Choice guaranteed before obligation	Choice guaranteed before obligation	OS1 not supported, OS4 somewhat supported
MOS Assignment: Officer	UK	OS1 – No choice, no guarantee	OS4 – No choice, no guarantee	Some choice but no guarantee	Both hypotheses supported
	IRL	OS1 – No choice, no guarantee	OS4 – No choice, no guarantee	No choice, no guarantee	Both hypotheses supported
	USA	OS1 – No choice, no guarantee	OS4 – No choice, no guarantee	No choice, no guarantee	Both hypotheses supported
Practice Variation over Time or Region	UK	OS1 – variation possible but not necessary	OS5 – variation	No variation	OS1 not contradicted OS5 not supported
	IRL	OS1 – variation possible but not necessary	OS5 – variation	No variation	OS1 not contradicted OS5 not supported
	USA	OS1 – variation possible but not necessary	OS5 – variation	Yes – variation over time with recruiting market	OS1 not contradicted OS5 supported

Level of Coordination b/t Military and Civilian Credentialing	UK	OS2a – moderate level of standardization and low level of importance predicts moderate effort	Moderate effort	OS2a supported
	IRL	OS2a – moderate-high level of standardization and low level of importance predicts moderate effort	Moderate-Low effort*	OS2a not well supported, but direction is correct
	USA	OS2a – low level of standardization and low level of importance predicts low effort	Low effort	OS2a supported
Provision of Skills Training	UK	OS3 – skills training available on competitive basis	skills training available on competitive basis	OS3 supported
	IRL	OS3 – skills training available on competitive basis	skills training available on competitive basis	OS3 supported
	USA	OS3 – skills training available on competitive basis	skills training available on competitive basis	OS3 supported

4.3 Continental Coordinated Market Economies

4.3.1 Germany

4.3.1.1 Vocational Education and Skills Certification

Germany's vocational training system is deservedly legendary for its combination of cost-sharing, high-quality training, and job-placement (Auer 2000, 119). The so-called dual system functions through state-employer-employee partnerships

whereby school leavers apply for training or apprenticeship positions (*Ausbildungsstellen* – trainees are known as *Auszubildende* or *Azubis*) with specific firms, and then spend the largest portion of the next three or four years being trained on the job at the firm, and the balance receiving “theoretical” training in a state-run school (*Berufsschule*). At the end of their training periods, all apprentices must take examinations administered by the Chambers of Commerce. These examinations serve to ensure that the skills the apprentices have learned on the job are not firm-specific but rather conform to what all well-trained persons in a particular occupation ought to be able to do (for an overview see W. Brand 1998).

Although *Azubis* are not necessarily guaranteed a job at the firm where they do their training, they do stay on at very high rates, since firms reap a number of benefits from hiring their own trainees (Soskice 1994; Wagner 1999). There is also a school-based vocational training system, which tends to be less successful in job placement and focuses disproportionately on traditionally female occupations (Krüger 1999). School-based vocational training has become more important in recent years, however, as the number of dual-system spots has fluctuated a great deal (*ibid.*).

One of the great advantages of this system is that it provides an organized, standardized bridge experience between compulsory schooling and work. However, the number of firm-based training places has not kept up with the number of school-leavers seeking spots, which has allowed firms to have their pick of the applicants. In practice,

in many regions of Germany, it is no longer possible to get an apprenticeship with less than a *Realschulabschluss*, and in some cases even an *Abitur* (Soskice 1994, 41).²⁹ This means that there is a large pool of school leavers with only a *Hauptschulabschluss* and no apprenticeship, who will probably become unskilled laborers for a few years and then be potential *Bundeswehr* recruits – not least for the promise of training. The fear that supply and demand will force the *Bundeswehr* to rely disproportionately on such recruits is one of the reasons that many military personnel still support conscription.

As a CCME military, the *Bundeswehr* ought to guarantee the specialty of the recruit's choice – both officer and enlisted – before the point of obligation (OS1). It should have very little flexibility on this point. It should also ensure that all its further education and training programs are civilian-recognized and certified (OS2). It should guarantee vocational training of some kind for all personnel (OS3). The two alternative hypotheses suggest that practices will differ for enlisted personnel and officers (OS4), and that assignment practices may vary over time as recruiting becomes more or less difficult (OS5).

²⁹ Note that Soskice's analysis was more than ten years ago, and the trend has continued. The regional effects come from the facts that distribution of secondary students across tracks varies regionally, that the quality of the tracks also varies regionally (somewhat), and that businesses tend to recruit locally, so supply and demand will also depend on the density and needs of training firms in a given region.

4.3.1.2 Occupational Specialty Assignments and Training

As was mentioned in the previous chapter, the German military has been moving toward targeted recruitment, ostensibly to cut down on training costs, but also perhaps to limit the number of full-career contracts they have to hand out in order to get specialists to stay on for a medium-length term. “Targeted recruiting” means that the *Bundeswehr* is especially interested in hiring people *already qualified* for specific jobs. However, the last chapter also noted that the *Bundeswehr* had not been completely successful at this (see e.g. PSZ-I 2003, esp. pg. 6), and that one of its most important recruiting tools is the promise of vocational training. Although their selection processes differ somewhat (see preceding chapter), occupational specialty assignment for all four tracks in the *Bundeswehr* is relatively similar. Normally, people interested in joining the *Bundeswehr* in any capacity have informed themselves about it either through the website or through their talks with a recruiter. The website features a list of specific jobs for which the *Bundeswehr* is always looking for recruits, and recruiting offices have complete lists of the jobs available at any given time. Thus, most young people who make it to the screening and testing stage have a good idea of what kinds of jobs they would like to do.

Following the round of tests and exams, applicants are informed about the specialties which are open to them, given the results of their tests, and decide themselves which specialty to take. All applicants to non-officer tracks will be counseled

about their further training and education options before they sign a contract, and if they possess the necessary preliminary qualifications and the *Bundeswehr* has a need and training availability, they can be guaranteed further training in their particular field leading to higher certification before they commit to service (BmVg, “*Arbeitgeber Bundeswehr*”, 16).

For applicants to the *Unteroffizier* and *Feldwebel* tracks, a test of occupational aptitude is part of the screening. This test establishes the applicant’s suitability for a set of occupations, and the final choice is made in a consensus-based discussion about the applicant’s preferences and aptitude, and the needs of the service. Applicants are free to withdraw from the enlistment process if they cannot find a specialty they wish to pursue. Those who have a strong desire to serve in the *Bundeswehr* and qualify for a specialty but fail to pass some part of the screening process for the higher tracks will often choose to serve in the *Mannschaften*.

For officer candidates, occupational specialty assignment is also determined at the application stage, through the testing and interviews at the OPZ (see previous chapter). Applicants are accepted as officer candidates only if they can reach an agreement with the examining officers on what course of university study *and* what occupational specialty they will pursue. Their courses in university are normally directly tied to their intended functions, and provided they complete their studies successfully, there should be no change of specialty.

Germany's standardized and highly regulated system of occupational certification made it a relatively simple task for the *Bundeswehr* to harmonize its training and certifications. Perhaps the most impressive part of the harmonization process came in 1998/99, when the Ministry of Defense began an initiative through which businesses agree to train more apprentices than they need, the *Bundeswehr* contributes to the cost of training, and the apprentice is guaranteed/obligated to a job in the *Bundeswehr* (minimum of four years) upon successful completion (*Bundesanstalt für Arbeit* 1998).

These civil apprenticeships (*Auszubildendenstellen*) are available in fifteen different occupations,³⁰ primarily in the fields of mechanics and electronics, and they are indistinguishable from apprenticeships not associated with the military. There are only about 200 of these apprentice positions available, and they are competitive like all others in Germany. With these as with others, it has become more and more difficult to win a spot with anything less than a *Realschulabschluss* or even *Abitur*.³¹ In practice, this means that a young person availing him- or herself of this program will probably be qualified

³⁰ For a list of the available occupations see <http://mil.bundeswehr-karriere.de/> : *Ihre Karriere : Mit Hauptschulabschluss : Azubi*. For a discussion of the program, see *Bundesanstalt für Arbeit* (1998) and www.bundeswehr.de : *Jugend und Karriere : Berliner Modell – Bundeswehr und Wirtschaft gemeinsam für qualifizierten Nachwuchs*.

³¹ In the original announcement, in *Bundesanstalt für Arbeit* 1998, it was claimed that the target group was young people with a *Hauptschul-* or *Realschulabschluss*. By 2003 (*Bundesanstalt für Arbeit* 2003), the offer had been limited to young people with a *Realschulabschluss*.

to enter the *Unteroffizier* or *Feldwebel* track directly (*Realschulabschluss* plus *Berufsabschluss*, refer to Table 10 on Education and Points of Entry).³²

The *Bundeswehr* has also been training its own apprentices almost since its inception, and can train both apprentices before their entry into military status and soldiers who are already in service. This training can last between 36 and 42 months, and follows the normal dual system (*BmVg "Arbeitgeber Bundeswehr"*, 17).

Those whose education qualifies them for the *Unteroffizier/Feldwebel* tracks, but who have not completed any kind of occupational training, are trained by the *Bundeswehr* through their "civilian trade training and further education" program (*Zivilberufliche Aus- und Weiterbildung, ZAW*). As its name suggests, this program is separate from general military training and is skill/trade/occupation-specific. It is equivalent to civilian training, results in the same certification, and is constantly monitored and updated to remain abreast of developments in the civilian training schema. Those individuals whose military function is occupational receive their ZAW at the beginning of their service; those whose function is non-occupational (e.g. infantry) usually receive the ZAW at the end of their contract periods. For officers, the *Bundeswehr*

³² The conditions are slightly confusing, since the career tracks organization was changed in 2002, AFTER the initiation of these apprenticeships. Generally speaking, those taking part in this program will be qualified to enter the *Unteroffizier/Feldwebel* tracks, but in order to do so, they must pass the respective exams for those tracks. If they fail at that, or if they simply prefer not to serve at that level, they can fulfill their service obligations in the *Mannschaften*.

universities are accredited to award the same degrees as civilian universities, in fifteen university major subjects and three applied sciences (*Fachhochschule*) subjects.

The evidence supports the prediction that the *Bundeswehr* would guarantee an occupational specialty before any service obligation was incurred, and would give the individual a high amount of influence over the choice of specialty (OS1). In no case is an individual obligated to service before he or she is assured of an occupational specialty. Furthermore, in every case, given the range of specialties available through the individual's aptitude and the needs of the service, the individual's choice is the determining factor in specialty assignment. This is true for both officers and enlisted personnel, contradicting hypothesis OS4. Hypothesis OS2 led us to expect that training would be highly coordinated and harmonized with the civilian system, and this hypothesis is also supported. Vocational and occupational training in the *Bundeswehr* is an extremely prominent aspect of recruiting, and it is essentially fully harmonized with the civilian credentialing system. It is also clear from various *Bundeswehr* publications and publicity that the organization considers the tasks of preparing individuals for useful service in the military and preparing them vocationally to re-enter the civilian labor market to be equally important. All service-members are guaranteed the chance at some form of vocational certification, whether that occurs as part of their preparation for military service or at the end in preparation for resettlement, supporting OS3.

Specialty assignment practices do not appear to have changed much over the last fifteen years, appearing to contradict the alternative hypothesis OS5, but it must be remembered that Germany maintains conscription and is thus able to address recruiting problems by pulling in greater numbers of conscripts. Thus, my argument that its assignment practices are based on its market type is not contradicted, but the alternative presented by hypothesis OS5 cannot necessarily be ruled out.

4.3.2 Netherlands

4.3.2.1 Vocational Education and Skills Certification

In the Netherlands, the vocational education system is similar but not identical to that in Germany. The lowest track, pre-vocational secondary education (VMBO), prepares pupils for senior secondary vocational education (MBO), which includes elements similar to the German dual system. There are two main “paths” in MBO, distinguished by the amount of time pupils spend in practical occupational training as opposed to classroom “theoretical” training. The block-release path (*Beroepsbegeleidende Leerweg* – BBL) consists of four days practical training at a company and one day of school per week. The vocational training path (*Beroepsopleidende Leerweg* – BOL) consists mainly of “theoretical” training and will have a practical component of between 20%

and 60%.³³ Pupils completing MBO may either go on to higher professional education (HBO), or they may enter the work-force.

The next higher track of secondary education, HAVO, is general secondary education, with somewhat less of a vocational component than the German *Realschule*. It leads directly to higher professional education (HBO), which is practice-oriented/vocational rather than academic and involves a mandatory nine-month practical internship.³⁴ It is perhaps comparable to the German *Fachhochschule*. Completing the first year of HBO entitles students to enter an academic course of study at a university (WO). The highest secondary track, VWO, is the university preparatory track and includes basically no vocational training. It is possible for VWO pupils to go to HBO instead of university (WO), if they wish.

As was noted in the previous chapter, the Dutch system exhibits a good bit more permeability than the German system, offering greater possibilities for upward mobility and reducing the competitive element in vocational training. However, certification is just as centralized and standardized as it is in Germany, and just as important on the

³³ The educational system in the Netherlands is extremely complex and has undergone recent changes, making it difficult to explain it concisely. For the best explanation of the Dutch educational system which I have been able to find, see the website of the National Reference Point Netherlands <http://www.nlgrp.nl/> : Education and Training in the Netherlands. The National Reference Point is a European Union-wide initiative to make vocational education and requirements in different member-states more transparent in order to facilitate labor mobility.

³⁴ The areas covered in HBO are: teacher training, agriculture, technical and scientific areas, health care, economics and management, social and community work, and fine and performing arts (www.nlgrp.nl : Education and Training in the Netherlands : Higher Education).

labor market. A CITOgroep consulting report noted that there is a plethora of company-based post-secondary instruction available, but that the ones which do not conclude with “an official examination and a nationally accredited diploma” have “little value on the labor market” (de Knecht-van Eekelen 2002, 43). Ben Hövels notes that education researchers in the Netherlands decided toward the end of the 1980s to re-define early school-leaving to include anyone who left school without a “qualification equal to the level of initial apprenticeship” (Hövels et al. 1999, 26ff.). This could actually include young people who finish the highest track of secondary general education (VWO) but have no vocational qualification and do not go on to post-secondary education because, in effect, such young people are *less* qualified for the labor market than those who followed lower tracks but achieved some vocational certification. This simply underlines the huge importance of certification on the Dutch labor market.

According to the hypotheses, we should expect the Royal Netherlands Army to guarantee recruits the occupational specialty of their choice (given eligibility) before obligation (OS1), and to ensure that its further education and training programs are civilian-recognized and certified (OS2). They should also guarantee every service-member some kind of vocational training, even if it is not relevant to the person’s military function (OS3). The alternative hypotheses predict that practices will differ for enlisted personnel and officers (OS4), and that specialty assignment will differ over time with recruiting trends (OS5).

4.3.2.2 Occupational Specialty Assignments and Training

The last chapter mentioned the fact that job openings in the Dutch military are advertised online individually, so that most of the young people who go to recruiting offices already have a good idea of what they would like to do and whether there is room for them to do it. The process of assignment for *Manschappen* is much like that for German enlisted personnel: the recruiter will review the applicant's qualifications and take him or her through the battery of tests, and at the end they will discuss the applicant's options (interview with Major van der Veen, 12 June 2006). For both *Onderofficieren* and Officers, their specialty is decided cooperatively during their interview with the Appointments and Advisory Committee (*Aanstellings en Advies Commissie* – AAC). This process is also similar to that in the German military, where test and interview information is reviewed by a board, the applicant is asked about his interests and preferences, and the parties attempt to find a consensus in the best interests of all concerned. Thus occupational specialty is determined by the individual and guaranteed before the contract is signed.

In the early 1990s, the Netherlands began a long-term and conscious effort to redesign military training programs so that they would be compatible with civilian programs (van der Meulen et al. 2000; Ezendam 2001). Behind this push was an explicit recognition that “a low unemployment rate among former professional soldiers [was] considered to be one of the most powerful recruitment assets of the new all-volunteer

army” (van der Meulen et al. 2000, 292). One of the aspects of this attention to post-military marketability is the fact that every service-member with a temporary contract (BBT) is supervised by the Civil Education Guidance Organization (*Begeleidingsorganisatie Civiel Onderwijs - BOCO*). The BOCO Knowledge Centre is responsible for the certification of all military training and experience (Ezendam 2001, 3). The BOCO helps to ensure that individual service-members receive proper accreditation for all the training they do. Commanding officers have also had the option to record the work experience and behavioral characteristics especially of temporary-contract (*Beroepsbepaalde Tijd - BBT*) service-members on a “work experience certificate” (*werkervaringscertificaat*). This is similar to the LME practice of providing a sort of “transcript”, but it is optional (Ezendam 2001). Finally, six months before a BBT contract is to run out, the service-member will be contacted by a labor market guidance counselor to help him or her find a job in the civilian world (Kamp 1999).

Like both Germany and the United Kingdom, the Netherlands has a training option for youth sixteen to seventeen who are interested in the military but too young to serve. Where the British program is oriented primarily towards military skills, however, the Dutch and German programs are essentially occupational apprenticeships. There are two programs of so-called “inflow-training” (*instroomopleidingen*), both of which are fully accredited senior secondary vocational education (MBO) programs. One is dedicated to the Army (the “orientation year” – *Orientatiejaar van de Koninklijke*

Landmacht), the other introduces young people to both the Army and the Navy (the “peace and security” – *Vrede en Veiligheid* – program), allowing them to choose one service half-way through. Both of these offer two levels of MBO training.

All temporary-contract (BBT) soldiers have a right to study part-time for their MBO (senior secondary vocational education) diploma if they do not already have one, and the military covers most or all costs of the education. Service-members have the right to a half-workday per week to study.³⁵ All education and training takes place through the normal civilian Regional Training Centers (*Regionale Opleidings Centra* – ROCs), which is where all Dutch students pursuing MBO do their studies. The Dutch military also offers apprenticeships to those with some MBO-, HBO-, or university-level education. Two types of apprenticeship are available: one starting at the entry-level (*Praktijkstage* – for those with only MBO) and one offering entry at the advanced level for people who have already begun HBO or university (*Afstudeerstage*).³⁶ Both result in HBO certification.

Officers on the short model have essentially no opportunity to pursue further education through the military, although they may (if qualified) pursue distance studies with a university. Officers on the long model will do approximately three or four years

³⁵ It seems that this arrangement has led to some problems and is under consideration for revision, possibly to a set-up more similar to the German re-settlement programs (personal correspondence with Majoor Max van den Heuvel of PERSCO, 26 Feb 07).

³⁶ See <http://www.werkenbijdelandmacht.nl/index.html?cid=70&l1=7&l2=52&l3=100>.

of academic study at the Royal Military Academy (KMA) in Breda, but currently only one of the “majors” is accredited as a bachelor’s degree (civil engineering). The Military has been working on getting all five majors in the Faculty of Military Sciences (*Faculteit Militaire Wetenschappen* – FMW) accredited, and expects to have achieved success by 2009 (<http://www.nlda.nl/>).³⁷ Until then, the studies at the KMA entitle the individual to enter the final year of university study, which many choose to do by distance learning (van der Meulen et al. 2000, 291f.).

The Netherlands Defense Academy offers a number of courses of further study for officers, including both Intermediate and Higher Defense Education. Intermediate Defense Education (*Middelbare Defensie Vorming*) is designed for officers at the rank of Captain, but does not seem to have a civilian equivalent. The Higher Defense Education course (*Hogere Defensie Vorming*) offered by the Netherlands Defense Academy has already been accredited at a master’s degree level (<http://www.nlda.nl/> : IDL). This is the training an officer will go through at about the Major/LtCol level.

In addition to the opportunities for formal education, the military has been working with a number of consulting groups and civilian agencies on the issue of Accreditation (or Recognition) of Prior Learning (*Erkening van Verworvene Competenties* –

³⁷ There are currently only five “majors” available at the FMW: Military Science/Strategic Studies (*Krijgswetenschappen*), Military Systems and Technology, Business and Management (*Bedrijfs- en Bestuurswetenschappen*), Civil Engineering, and Communications, Information, and Command/Control Systems (<http://www.nlda.nl/>). Civil Engineering has already been recognized/accredited at the bachelor level in cooperation with the University Twente (<http://www.nlda.nl/> : IDL)

EVC). This is an attempt to recognize and accredit the competencies one acquires through both formal military training and informal job experience. The Netherlands has looked to the American and British systems for guidance in this somewhat complex process because the Americans and British, as we saw above, have long experience in the practice of evaluating job experience and informal training. This is, however, an ongoing process and it will take some time before all military competencies are evaluated and accredited.³⁸ The Dutch researchers note that the American push to recognize informal learning was aimed primarily at obtaining access to higher education, while the Dutch are interested in fitting people for the labor market (see also de Knecht-van Eekelen 2002). They are thus looking to the American model for how to accredit informal learning, but for different purposes.

Table 13: Summary of CCME Occupational Specialty Hypotheses and Results

		Expected		Actual	Results
MOS Assignment: Enlisted	GER	OS1 – choice guaranteed before obligation	OS4 – choice guaranteed before obligation	Choice guaranteed before obligation	Both hypotheses supported
	NL	OS1 – choice guaranteed before obligation	OS4 – choice guaranteed before obligation	Choice guaranteed before obligation	Both hypotheses supported
MOS Assignment: Officer	GER	OS1 – choice guaranteed	OS4 – No choice, no guarantee	Choice guaranteed before obligation	OS1 supported OS4 not supported

³⁸ This attempt has been going on since the late 1990s, in anticipation of a shortfall in the number of new labor market entrants with post-secondary education (see e.g. Scholten and Teuwsen 2001).

		before obligation			
	NL	OS1 – choice guaranteed before obligation	OS4 – No choice, no guarantee	Choice guaranteed before obligation	OS1 supported OS4 not supported
Practice Variation over Time or Region	GER	OS1 – no variation	OS5 – variation	No variation	OS1 supported OS5 not supported
	NL	OS1 – no variation	OS5 – variation	No variation	OS1 supported OS5 not supported
Level of Coordination b/t Military and Civilian Credentialing	GER	OS2 – high importance and high standardization predict high effort		High effort	OS2 supported
	NL	OS2 – high importance and high standardization predict high effort		High effort	OS2 supported
Provision of Skills Training	GER	OS3 – skills training guaranteed to all w/ more than initial contract		skills training guaranteed to all w/ more than initial contract	OS3 supported
	NL	OS3 – skills training guaranteed to all w/ more than initial contract		skills training guaranteed to all w/ more than initial contract	OS3 supported

4.4 Conclusions

In general, the evidence fits the expected pattern. Militaries in a Continental Coordinated Market Economy context were expected to offer a contracting process which gave the recruit a high degree of both choice and certainty over his specialty assignment (OS1). This was true in all cases, i.e. for all tracks in both countries. Militaries in a Liberal Market context were expected to offer less choice and certainty (OS1). All

three LME militaries featured low choice and certainty for officer recruits. The two exceptions were the practices of the British and American Armies, both of which offer high choice and certainty to enlisted recruits.

It is difficult to tell which of the three Liberal Market Economies is the exception in this case. The United Kingdom has a long-standing practice of matching enlisted recruits to jobs before swearing them in, similar to the CCME process, and this practice does not seem to have fluctuated at all with market pressures. The Irish offer practically no choice or guarantee, and this fluctuates only slightly with market pressures (i.e. people with special skills may be promised an early transfer to a technical service corps). Ireland's tendency may simply be due to the Army's small size and low need for specialization, but it is also likely that the LME context is a necessary permissive condition for maintaining the low-specialization organization. The American practice for enlisted personnel is self-consciously market-motivated, and has moved slowly from a situation of no choice/no guarantee to one of choice and guarantee, but there is no indication that it would not revert back to no choice/no guarantee if the recruiting situation were to change.

One alternative hypothesis indicated that enlisted personnel ought to be more likely to get guarantees for both socio-historical and economic reasons (OS4), and the other indicated that practice should vary along the scale of choice and guarantee depending upon how easy or difficult recruiting was (OS5). Although neither of these

alternatives was borne out in the overall cross-national comparison as the most important explanatory variable, they both found some support within the group of LME countries. This variation within LMEs could be taken as further support for the claim that the market importance of occupational skills is stronger in CCMEs – stronger to the point that variation of the kind seen in the LMEs is simply not feasible. The Netherlands certainly went from less to more difficult recruiting when they changed to an all-volunteer force in the mid-1990s, yet even when recruiting was comparatively easy they offered their recruits choice and guarantee. Germany maintains conscription, easing the pressure of recruiting, and yet maintains a system of occupational specialty assignment which the alternative hypothesis would predict for a difficult recruiting environment. The only way in which these assignment practices are “market-driven” is in the larger sense captured by my theory: CCME labor markets in general require these practices.

Hypotheses OS2 and OS2a took for granted the idea that some form of skills training and certification is always useful on the labor market. The significance of the LME-CCME divide is that occupational skills certification is supposed to be the primary criterion in which employers in a CCME are interested. This indicates that the promise not only of occupational skills training, but of civilian-recognized certification for that training, must be nice to have in an LME, but indispensable in a CCME. This is important for the purposes of recruiting, as very few people would join the military unless they could get either a lifetime contract or a guarantee of qualifications for

employment after service. However, it must not be overlooked that this is also important for encouraging people to *leave* the service. In any context, if the military were not capable of providing personnel with the skills necessary to find employment in the civilian sector, then far too many people would try to stay, and the military would either have to force them out (presenting potentially adverse incentives) or offer them generous severance packages. In a CCME context, the skills necessary for the labor market are occupational and they must be certified. In an LME context, in many cases, general skills are acquired without the military's needing to provide any particular training, and even occupational skills may not have to be certified to be valuable. Militaries in both countries have an incentive to coordinate with civilian credentialing authorities, but both the much higher urgency and the much greater ease (due to high standardization) in CCMEs was expected to lead to greater effort, and indeed greater success.

Vocational training is in fact far better integrated with the civilian vocational education system in CCMEs than in LMEs. The vocational training and education in CCME militaries is essentially fully integrated with the civilian system (although very slightly less so in the Netherlands than in Germany). While LME militaries make notable efforts to assist their soldiers and officers in getting credentials, their ability to do this is usually limited by the complexity of the civilian system. Offerings of further training and education in LME militaries tend to be modular and concentrate on general

academic and non-occupation-specific skills, while CCME militaries focus on sending their service-members through a well-defined occupational training career progression. Vocational training is far more prominent on the websites and in the informational packages of the CCME militaries than for those of the LMEs. The latter emphasize general skills much more than occupational skills in the areas of recruiting, further education offerings, and even separation packages.

In confirmation of OS3, CCME militaries were also more likely to ensure that all service personnel had access to further training regardless of their military functions, while LME militaries tended to offer further training on a competitive and selective basis, if at all.

A few policy implications might be drawn from this analysis. The first is that, if it is in fact the case that militaries in CCME contexts are recruiting on the strength of their vocational training programs, then they might face serious shortfalls if businesses were to increase their training efforts significantly. More research is needed to know for certain, but it seems possible that if more school-leavers can find training with a firm, fewer may choose the military. It is also possible that the international economy could shift such that it was impossible to sustain the attractiveness of apprenticeship-type training in CCME countries. This would pose much larger problems than just a military recruiting shortfall, but military reform would probably also be necessary. Another problem is that CCME militaries, bound as it were already to offer choice and certainty

about occupational specialty, have little leeway to make their offers more attractive should recruiting become more arduous. This is especially the case if it remains difficult for them to use targeted bonus schemes.

As did the last chapter, this chapter indicates that LME militaries may be more flexible and better able to respond to fluctuations in both the demand and the supply for quality manpower. On the other hand, the CCME focus on providing comprehensive occupational qualifications may potentially indicate a higher overall level of occupational skills in CCME militaries, which might in turn have implications for the kinds of tasks such militaries are better at doing. The element of choice might also have repercussions on job satisfaction and other organizational climate issues. These questions bear further investigation. One extremely important question which this study is not able to address is the impact of differential training practices on post-military employment for service-members. Although one might expect that the higher skills training available in the CCME militaries would lead to better employment chances, the Varieties of Capitalism argument indicates that such formal training and certification may simply be unnecessary on an LME labor market. It would be a further test of the theoretical framework to discover that service-members with very different skill sets and levels of certification nonetheless had equal levels of post-military employment due to the difference in labor market requirements.

Another potentially interesting point for further research is whether the evident differences between officers and enlisted in most LME militaries, and the lack of difference between them in CCME militaries, has anything to do with traditional differences in the role of management in companies. Liberal Market Economies are characterized by sharp distinctions between shop-floor and management, where management is usually able to make unilateral decisions and often does not possess the same kind of technical expertise as the workers. In CCMEs, on the other hand, management is usually trained and competent in the same occupational skill as many of the workers, and tends to collaborate with them in teams. Alternatively, the distinctions could have something to do with the role of employee representation, which tends to be more active in CCMEs than in LMEs. These are all fruitful avenues for further investigation and may have more implications for operational capabilities.

5. Terms of Contract and Separations Policy

The preceding chapters have analyzed the ways in which the educational and training systems, as well as the emphasis on certification for hiring, shape military selection, accessions, and occupational specialty assignment and training. Many of the issues raised in those chapters, including internal labor markets and the acquisition of firm-specific skills, are related to expected tenure at the firm, or job security. Job security is also a major factor in both recruiting and retention: in a context where high job security is the norm for most employees, an employer who can neither offer it nor offset its absence with high pay is at a distinct disadvantage. In a low-security context, employers can tout even moderate job security as a benefit, but may also have to work harder to retain their best employees. Firms would like to use terms of contract to control the in- and out-flow of workers at particular levels, shaping their overall personnel profiles, but they must also take employees' wishes and expectations into account.

This chapter focuses on how the normal contracting practices and job security guarantees of different economic types shape and affect the terms of military contracts, particularly with respect to conditions of voluntary and involuntary separation from

service.¹ The main argument is that, where military practices on terms of contract and separations diverge, they will diverge in the directions predicted by characteristic differences in job security and the flexibility of external labor markets in CCMEs and LMEs. Militaries' functional requirements for in-firm training and young, fit people will mitigate the differences we might expect to see, so that CCME and LME militaries ought to look more similar to one another than firms in each type do, but they should still diverge moderately in the predicted directions.

Of all the areas of policy covered in this study, this is the one where we are likely to see the most similarity between militaries. The pressure of countervailing functional requirements – a need to train and retain on the one hand, and to bring in young people and offer them opportunities to advance their careers on the other – might be expected to cause militaries everywhere to put their own interests above the re-integration interests of their employees. There is, after all, only so much the military can do. This line of reasoning would expect that there be no significant differences among the various militaries on how contracts are structured and how separation works, regardless of the economic context. Another alternative argument is that those militaries under a great deal of operational pressure will want to exercise more control over their personnel than militaries which are less active. If this were the case, then the American and British

¹ I use the term "separation(s)" (and all its conjugations) to refer to an individual's exit from military service. This should not be confused with the British use of the term "separated", which refers to service-members who are serving abroad on operations or exercises and thus "separated" from their families or homes. I use the American term "deployed" for such personnel.

militaries ought to exhibit far more restrictive practices and organizational prerogative than the other three. These two are far more expeditionary than any of the others and have also tended to have higher personnel tempos than the other militaries in the last ten years. This pressure might require the military to exercise more control over its personnel. The other three militaries, by comparison, have not had to deploy large numbers of people for long periods, and thus might have the flexibility to give their employees more freedom and control over their terms of service.

While a failure to find positive support for my hypotheses in this chapter would weaken my theory, it will not be a negative finding simply to discover that military practices do not diverge much. Because I am not claiming that market structure is the only important factor, and because I acknowledge that functional pressures are also significant, a finding of no divergence might simply indicate that this is an area where functional pressures are more important than economic infrastructure. A true negative finding, and a difficulty for my theory, would arise if I were to find divergence in practice, but divergence in directions not predicted by the economic infrastructure. A positive finding in this chapter, however, would be strong evidence for my theory, since this area (along with selection processes) is a hard case for cross-country differences. I find that militaries do in fact look more like one another than firms do, but that there are certainly divergences and they are almost entirely in the predicted directions.

To summarize, the main hypotheses were:

TC1: Contracts in LME militaries ought to feature a larger number of points where the organization has a structured opportunity to end the employment relationship against the individual's will (ordinary involuntary separation), than contracts in CCME militaries.

Examples include limited-term renewable contracts; the use of some up-or-out mechanism tied to promotion, time in service, or age; or simple control points tied to time in service or age. Fixed-term contracts provide both the individual and the organization with a structured opportunity to end the employment relationship; up-or-out or control points are organizational tools only. This hypothesis predicts that LME militaries will feature more such tools than will CCME militaries.

While I expect extraordinary involuntary separation to be somewhat difficult in all militaries due to their need to provide some kind of security to their employees, I do expect its ease to vary with the context. In LMEs, therefore, I expect extraordinary involuntary separation from the military to be easier than it would be in CCMEs. This is because such firing is simply more normal in LMEs than in CCMEs in general.

TC1a: Extraordinary involuntary separation ought to be easier in LME militaries than in CCME militaries

It should be easier in LMEs than in CCMEs to leave the military at some point other than the end of a contract period. Making it difficult to leave at any other time is

consistent with the generally greater tendency of CCME employment relationships to be structured for certainty on both sides, while open-ended contracts are more consistent with the greater flexibility of LME employment relationships.

TC2: Contracts in CCME militaries ought to be more likely than those in LME militaries to structure the individual's opportunities to leave the service voluntarily; LME contracts should feature more freedom for the individual to choose when he or she will leave.

TC3: In CCMEs, militaries ought to be able to offer fixed-term contracts for longer periods than private-sector employers can.

TC4: Voluntary separation ought to be more difficult in LME militaries than in LME firms. It ought to be approximately equal or slightly more difficult in CCME militaries than in CCME firms.

TC5: Involuntary separation ought to be more difficult in LME militaries than in LME firms. It ought to be approximately equal in CCME militaries and firms.

While CCME militaries' practice can be expected to be similar to their firms' (as the inflexibility required by the military's training scheme is similar to CCME structures), LME militaries are expected to be closer to the CCME militaries than LME firms are to CCME firms. Thus if LME firms are on the left end of a spectrum and CCME firms on the right end, both militaries ought to be in the middle, but somewhat closer to the CCME end, with CCME militaries between LME militaries and CCME firms.

The alternative hypotheses were:

TC6: Terms of contract and ease of separation will be very similar across all countries.

TC7: Militaries which have a more expeditionary mission posture (the USA and UK) will have similar policies, while the less active militaries (Ireland, Netherlands, and Germany) will form a group with similar policies.

TC7a – In the expeditionary militaries, voluntary separation will be more difficult than involuntary separation, while in the less expeditionary militaries voluntary separation will be as easy as or easier than involuntary separation.

TC7b – In the expeditionary militaries, involuntary separation will be easier than in the non-expeditionary militaries, where it ought to be exceedingly difficult.

The next sections will describe briefly both civilian and military contracting practices in each country.

5.1 Liberal Market Economies

5.1.1 The United Kingdom

5.1.1.1 Terms of Contract and Separations in the Civilian Economy

Generally speaking and based on the common law tradition, both employers and employees in the United Kingdom have the right to terminate their contracts at any time, given a period of notice (International Labour Organization 2000, 348). The period

of notice is set by statute at a minimum of one week but can be set by contract at a longer period (European Commission 1997, 53; International Labour Organization 2000, 348). Employers are also required to give more notice to employees who have worked for longer; the required period may be anywhere from one to twelve weeks (European Commission 1997, 29-30; International Labour Organization 2000). Probationary periods can be arranged or not by the contracting parties; there are essentially no laws regarding probation except that such periods cannot be characterized by fewer rights than are provided for by statute (European Commission 1997, 65).

For managerial-level employees (cf. officers), British employers will often follow a practice of payment in lieu of notice. Such an employee may be fired with immediate effect, but will be paid a generous severance package (Dent 2006, 188). Laws regarding unfair dismissal make it illegal for an employer to fire an employee on the basis of discrimination, and have also been held to disallow firing with no cause (see e.g. the 1996 Employment Rights Act ERA). This leaves the employee at a slight advantage over the employer, as the former can still choose to end the contract arbitrarily and with short notice, while the latter may not.

Regulations regarding post-termination activities are also sparse. Non-competition clauses are extremely difficult to enforce in the UK and are rarely used (Dent 2006). The contracting parties usually discuss and come to an agreement on whether references will be provided or not. It is taken for granted that the reference will

deal with the quality of the work, and the employee is entitled to redress if he believes the reference was unfair (European Commission 1997, 60).

In sum, termination of the contract is very easy for the employee, and only slightly more difficult for the employer. There are few obstacles to the employee seeking other employment and leaving a position specifically to enter other employment. Employers must usually have cause for termination, but the definition of what constitutes “cause” is relatively loose and essentially amounts to protection against completely arbitrary firing. There are no rules about the maximum length of fixed-term contracts and practically no rules about probation periods. The external labor market is relatively robust. Most legislation on unfair dismissal does not apply to the military (European Commission 1997, 7f.), but as we will see below, the military’s procedures for dismissal are so much more cumbersome than those in the civilian world that this is not a significant issue.

5.1.1.2 Military Contracts

Since January 1991, anyone enlisting in the Royal Army has enlisted under what is called the Open Engagement. For those enlisting between 1991 and 1999, the terms of this engagement were service for 22 years, with the right to give twelve months’ notice to leave the service at any time after completing two years of service from “the relevant date” – age 18 or the date of attestation, whichever is later (QR 9.073 a-e). Beginning in November of 1999, the minimum obligation was increased to three years of service, and

as of January 2007 it stands at four years,² but the other terms remain unchanged.³ In all cases, soldiers requesting or agreeing to courses of specialized instruction (those lasting longer than ten weeks) are required to endure longer periods of obligated service.

Anyone who enlisted before 1991 is most likely on what was known as the Notice Engagement. This was similar to the Open Engagement in that it was a contract for 22 years of service from age 18 with the right to leave any time after three years of service with 12 months' notice, but it also included options to obligate for longer periods of minimum service in return for higher pay. This is no longer possible. Other features of the Notice Engagement were that it allowed "Junior Entrants" – youths between 16 and 17 years of age – to join.⁴

² http://www.army.mod.uk/servingsoldier/termsofserv/sldreng/ss_tos_engagements_w.html

³ A number of other engagements are also available, but for limited purposes and involving small numbers. These include:

- Type S and Special Type S – used mainly for prior enlisted who would like to re-enlist but are over the age limit, or for persons serving in the Territorial Army (part-time reserves) to serve temporarily on the Active List,
- Type O – for up to six years of service, limited to those who are enlisting specifically with the object of gaining a commission,
- Type Y – an opportunity for persons between 16 years and 19 years 7 months old to serve for one or two years with 14 days' notice, and
- Military Local Service Engagement – used only for Adjutant General needs, this allows people to enlist for three-year periods (renewable at the individual's initiative) for service in a particular location in the United Kingdom (QR 9.075).

⁴ Junior Entrants who were selected for the Band or for apprenticeships were obligated to nine years of service from their 18th birthdays (on account of the highly specialized training they would receive). Other Junior Entrants, who would receive more military-oriented training, were obligated to six years of service from their 18th birthdays.

Individuals who wish to serve for longer than 22 years may, any time after 18 years of continuous service, apply for continuance of service.⁵ The mere application for continuance does not waive the soldier's right to give 12 months' notice and transfer to the reserves. Soldiers actually serving on continuance may terminate their service with six months' notice, unless they have obligated themselves to a certain period (QR 9.107). It is possible to serve in the enlisted ranks up to a normal maximum age of 55 if the individual is "efficient, well behaved, and medically suitable" (QR 9.098a) and there is a job available for him or her to do.⁶

Officers hold a commission from the crown and serve at the pleasure of the Queen. Before 1999, officers usually received a Regular Commission (see below) upon completion of training at Sandhurst. Beginning in March of 1999, new terms of officer service were implemented to provide a "stepping stone approach", and beginning in

⁵ There are three types of continuance available:

- Long Service List – for limited numbers of select individuals; they are not guaranteed employment to age 55, but the Army makes every effort to keep them employed until then
- Career Continuation – granted in 5-year blocks, this is an option for the Army to retain people with special skills or attributes who would like to make a full career in the enlisted ranks, and
- Limited Continuance – involving short periods of extra service normally granted either to allow a person to reach the required number of years in grade for pension benefits in that grade, or for him or her to complete a job the Army needs done (QR 9.099 a-b).

⁶ It is in fact possible to retain an enlisted soldier up to the absolute maximum age of 60 (QR 9.103), but the application must be made by the individual's commanding officer to the Ministry of Defence, and the commanding officer must convince both the Divisional Colonel for Manning and Career Management and the Ministry that there is no reasonable way that the individual's job could be filled by a younger soldier. These continuations may be granted for periods of one year at a time.

2000, the terms were changed from age-based to length-of-service-based regulations. The following description applies to so-called Direct Entry officers.⁷

With a few exceptions, officers graduating from Sandhurst are now granted a Short Service Commission (SSC) for a period of three years.⁸ That commission is extendable to a maximum of eight years. Upon the completion of two years of service, SSC officers become eligible to apply for an Intermediate Regular Commission (IRC). These commissions are for a period between ten years and however many years are necessary to get the officer to 16 years of total reckonable service (in order to reach the Immediate Pension Point). Officers on an IRC may be considered for award of a Regular Commission (Reg C) at any time once they have served at least two years of the IRC. A Regular Commission allows officers to serve for a total of 34 years of commissioned service, until they are either 55 or 60 years old (depending on whether they are subject to the age-based or length-of-service-based system).⁹ This is subject, however, to the officer's ability to get promoted to Major once granted a Regular Commission. Should he or she fail to gain Major rank, a Promotion Board will consider the officer for "selective early retirement" as a Captain at 16 years of service (Pay Warrant 1964 clause 246).

⁷ This is as opposed to Late Entry, who are Warrant Officers who receive a commission, and also not to be confused with Direct Entry officers in the United States, which is the term used for Professionally Qualified Officers who may enter at a higher rank.

⁸ Those who attended the sixth form at Welbeck are granted Intermediate Regular Commissions upon graduation from Sandhurst.

⁹ This means that a determined officer could have a Regular Commission by the time after only five or six years of service.

Probationary periods

Recruits who fail to report for training/duty even after having been attested (sworn in) will generally not be pursued by the Army. The rationale is that such individuals are not likely to prove reliable (interview with Major Robert Hambly, 17 July 2006). Recruits who have reported for full-time paid duty (including training) have the right, after 28 days and before three months have elapsed, to give 14 days' notice and terminate their service (QR 9.292).¹⁰ There is no penalty or fee, and a request for discharge under this paragraph may not be refused except in a case of national emergency (QR 9.391).

Recruits may also be involuntarily discharged during the first six months of their service, as long as they are still undergoing either Phase I (basic military) or Phase II (specialist) training. This may occur in the case that an individual is found to be unable to complete training satisfactorily and is not expected to be a good soldier, when he or she is unable to adapt to the conditions of military life (e.g. communal living, hygiene), when he or she is an undesirable influence on other recruits, or for reasons of personal conduct undesirable or likely to bring discredit on the military (QR 9.383 – Unsuitable for Army Service). Recruits may also be discharged on medical grounds, subject to the Army's attempt to find employment for which the individual is sufficiently fit.

¹⁰ Recruits who were not yet 18 years old at attestation are given six months to ask for a discharge.

Officer candidates at Sandhurst go through three terms of 14 weeks each. It is a relatively simple matter for a cadet who has trouble adjusting to military life to drop out, and failure to complete training at Sandhurst whether due to fault or not will usually result in a simple discharge with no penalty attached. Those who are attempting to move from the enlisted to the officer ranks may simply return to enlisted service. Officers are not generally subject to probationary periods; the only exceptions are Professionally Qualified Officers (such as chaplains or medical officers). These individuals are subject to a twelve-month probationary period beginning from appointment and including their four-week PQO course (correspondence with Major Peter Cumines, 07 Feb 2007).

Separations

Generally, the soldier's commanding officer is the competent authority for discharge or transfer to the Reserves. The Director of Manning (Army) is the ultimate competent authority in all matters of discharge or transfer to the Reserves, and may even – under exceptional circumstances – approve a discharge even when the conditions laid out in the Queen's Regulations have not been fully met (QR 9.327). Although this is unlikely to happen, it indicates the amount of discretion left in the organization's hands. The existence of "stepping stones" for commissioned officers denotes a further form of personnel control: applications for longer service may simply be turned down. These

would then show up in personnel statistics as terminations of service at the expiration of contract.

- Voluntary Separation¹¹

Soldiers on any of the abovementioned Engagements are basically able to terminate their service at any time after their period of obligation, given the prescribed amount of notice. Women who become pregnant have the right to request a discharge on family grounds at any time before the birth, and after the birth before the expiration of maternity leave (QR 9.395 d). Before the introduction of the Open Engagement (i.e. before 1991), soldiers were also entitled to purchase a discharge during their period of obligation. This option is no longer available.¹² Finally, soldiers may request immediate discharge on compassionate grounds (QR 9.402). These usually include such situations as the death or illness of a close family member, or the obligation to care for dependents, and are granted at the discretion of the General Officer Commanding of the soldier's division or district. This provision also covers the possibility of discharge on grounds of conscientious objection, but the application for and investigation of conscientious

¹¹ Most enlisted personnel will owe 6 years of Reserve service upon voluntary termination of service with the Active List, unless the balance of time left on their 22 year engagement is less than six years, in which case they simply serve the balance. The reserve in the UK is comprised of two components: the Army Reserves, consisting of former soldiers who have finished their active service, and the Territorial Army, composed of civilians who volunteer to train part-time and constitute what is in effect a militia. The Army Reserve is far more likely to be mobilized than the Territorial Army.

¹² Legally speaking, it is still available, but because no soldier on any Engagement prior to the Open Engagement is still in his period of obligation, the option is irrelevant.

objector status is covered by another regulation (AGAI Vol. 5 Instruction 6). In both these cases, the burden of proof is on the individual.

Generally, an officer may offer his resignation at any time and it will be granted, provided he or she has completed at least three years of service, and is not subject to any special obligations. Special obligations may be incurred by e.g. undergoing specialist training such as pilot training. The Defence Council may impose further obligations with promotion, but this is done only in rare and exceptional circumstances, primarily because promotion is not considered voluntary (correspondence with Major Peter Cumines, 01 Feb 2007).

- Involuntary Separation

Unless a soldier has successfully applied for a continuance of service (see above), he or she will be discharged upon completion of 22 years of service, without specific notice (QR 9.307). Furthermore, soldiers who have been granted a continuance, but whom the Army decides it needs to discharge before the period of continuance expires, may be compulsorily discharged, but only with 12 months' notice from the Army to the individual (QR 9.838).

Other ("extraordinary") involuntary separations fall into four categories: those associated with serious disciplinary infractions or crimes, those associated with medical conditions (mental or physical), those associated with redundancy, and all other grounds "in the interest of the service". The first category does not constitute a concern

of this study, and covers all discharges relating to fraudulent or improper enlistment as well as to crimes, criminal proceedings (either military or civilian), and disciplinary proceedings (either judicial or non-judicial). The second category is also not a main focus, but the point should be made that it allows the military to discharge (fire) individuals on grounds of physical or mental disability, simple lack of physical fitness, and even temperamental unsuitability. This is different to the situation in civilian life, where those with disabilities are often protected by law, but does echo a firm's ability to fire workers who do not "fit" well with the organization.¹³ The third and fourth categories will receive a thorough discussion.

Soldiers who become redundant in or unsuitable for their current employment in the Armed Forces due to any circumstances other than a program of downsizing or restructuring will not automatically be discharged. The Army will attempt first to transfer the individual to another job or even another corps/branch in order to place him or her in an appropriate situation. Transfer to another job within the unit or corps may not require the soldier's consent, but transfer to another corps does (QR 9.231, 9.233,

¹³ Individuals who attempt to "fake" mental or temperamental disorders in hopes of an early discharge may be disciplined under military criminal or disciplinary codes, which is generally not the case in civilian employment.

9.234). If no other suitable employment can be found, the soldier may be discharged under the appropriate section.¹⁴

When the need to downsize or restructure requires mass redundancy discharges, the service will usually undertake a number of measures intended to make this as painless as possible. Service-members who would like to leave the service are asked to identify themselves, and the Army ensures, to the extent possible, that only those with sufficient reckonable service to receive a pension will be made redundant.¹⁵ Although the redundancies are compulsory and will be made in the best interests of the service, the military makes a good faith effort to minimize the negative impact of downsizing and restructuring. Redundancy decisions are also subject to the right of the soldier or officer to seek redress (Army Act 1955, Sec. 180).¹⁶

The fourth category includes such grounds as “retention undesirable in the interests of the service” (QR 9.405), which applies to soldiers beyond the training period who have been determined unsuitable for military service, or who have a persistent record of minor disciplinary infractions, drunkenness, indebtedness, or racial/sexual harassment. However, the procedure in such cases is for the commanding officer to

¹⁴ Usually QR 9.414: Services No Longer Required/Released from Army Service – the general clause covering soldiers whose discharge does not fall under any more specific paragraph.

¹⁵ Note here the contrast with the “last in, first out” principle often followed in civilian redundancy situations.

¹⁶ See e.g. the Army Pocket Brief on the Army Redundancy Programme 2006/2007 published in 2005, and the APC Army Redundancy Instruction, D/DMCM/MS(B)/1-04/100(MS4), 7 Feb 05.

warn the soldier that if his or her conduct does not improve within three months, discharge proceedings will begin. The commanding officer is expected to give the soldier every opportunity to improve his or her behavior, even placing him or her in another sub-unit if necessary. If the soldier is the rank of corporal or above, then he or she will be warned of reduction of rank rather than discharge.

The regulations also include a paragraph (QR 9.413) titled “not required for a full Army career”, which can be used to shed individuals at specific points in their careers (the three, six, nine, and twelve year points – with 12 months’ notice) to manage the rank profile. All soldiers are evaluated at eleven years of service for whether they will be needed for a full 22 years. If the Army finds that they are not suited, they will be discharged at 12 years’ service (i.e. with 12 months’ notice).

Officers can of course be forced out of the service for reasons of disciplinary or criminal misconduct, or for medical (mental or physical) reasons. They are also subject to redundancy for downsizing or restructuring. Their service can technically be terminated for gross misconduct not amounting to a criminal offense, but this is a last resort only (AGAI 67 and Annex L, 67L-2), and mere inefficiency is unlikely to justify such a response.

Promotion

Both enlisted and officers receive annual appraisals, usually from their commanding officers. Promotion to Corporal (Non-Commissioned Officer) and above is done by Promotion Board. There are some limitations on enlisted promotions based on maximum age (for Warrant Officers) and remaining time in service, and individuals must normally pass certain courses related to the next higher level of responsibility in order to be considered. Personnel are considered on merit; seniority is a consideration only insofar as the implication of experience influences a judgment of merit (QR 9.136).

For officers, promotion to Major and all subsequent ranks is done through a Promotion Board, and eligibility for consideration is based on time in rank and the completion of necessary educational units. Although individuals may sabotage their own promotion chances by refusing to attend certain training courses, for the most part, promotion is governed by Selection Boards and is not something for which an individual can apply or canvass. There is no requirement to be promoted to remain in the service, but those who consistently fail to obtain promotion are unlikely to be retained past twelve years (enlisted) or the 16-year Intermediate Regular Commission (officers). Retirement ages are not staggered by rank. All service-members below the rank of Major General are subject to a retirement age of 55 if they are still under the age-based terms of service and 60 if they are under the length-of-service-based terms.

5.1.1.3 Summary

Hypothesis TC1 indicated that military contracting practice in the United Kingdom ought to feature several points where the organization has a structured opportunity to end the employment relationship (high ease of ordinary involuntary separation). As Table 14 shows, there are in effect six such points for enlisted personnel (including the control points under QR 9.413) and four such points for officers. Hypothesis TC2 indicated that the individual's opportunities to leave service ought to be comparatively unstructured. Except for the requirement to serve out the period of obligation, there are essentially no restraints applied to an individual's ability to leave the service.

Hypotheses TC4 and TC5 predicted that both voluntary and involuntary separation ought to be more difficult in the military than in LME firms. Voluntary separation from the military, even at a time other than the end of a contract, is very easy in the United Kingdom. It requires only a notice of twelve months. This is more difficult than voluntary separation in the civilian economy in the UK, but still does not seem to present an untoward burden. Involuntary separation is more difficult than firing in the civilian world, but certainly not unheard-of. The organization does have the freedom to remove individuals who are detrimental to the Army's effectiveness or efficiency, whether due to the individual's fault or not. This requires commanders to go through elaborate procedures of warnings and rehabilitation and to provide substantiated

grounds for dismissal. Promotion is basically at the prerogative of the organization and is competitive, but there is almost no forced attrition through staggered retirement ages or up-or-out rules.¹⁷

Table 14: Summary of Separation Factors United Kingdom

	Points of Organizational Control over Exit	Points of Individual Control over Exit	Ease of Voluntary Separation	Ease of Ordinary Involuntary Separation	Ease of Extraordinary Involuntary Separation
Enlisted	1. control points at 3, 6, and 9 yrs 2. evaluation at 11 yrs (12 yr control point) 3. end of contract at 22 yrs 4. mandatory retirement age 55	Unlimited after obligation, subject to notice period (and acceptance)	High (after obligation is fulfilled)	Medium	Medium
Officers	1. end of SSC at 3 yrs 2. end of IRC at 13-16 yrs 3. with Reg C, failure to make promotion to Major 4. mandatory retirement age 55/60 (except MGen+)	Unlimited after obligation, subject to notice period (and acceptance)	High (after obligation is fulfilled)	Medium	Medium

¹⁷ The only exception being those individuals who fail to be selected for promotion to Major on a Regular Commission.

5.1.2 Ireland

5.1.2.1 Terms of Contract and Separations in the Civilian Economy

In Ireland, as in the United Kingdom, both employers and employees are generally free to terminate their contracts given a notice period. Employees with less than 13 weeks' employment and those who have been informed of a possible redundancy situation may leave with no notice. Those with more than 13 weeks' employment must give a minimum notice of one week (European Commission 1997, 52f.). Employers must give at least one week notice, and up to eight depending upon how long the employee has been with the company. In redundancy situations the minimum notice employers must give employees is two weeks (European Commission 1997, 29-30; International Labour Organization 2000).

Ireland has also implemented unfair dismissal laws which protect the employee from termination without cause. Rules on probationary periods and payment in lieu of notice are similar to the situation in the United Kingdom. Ireland does not allow anti-competition clauses in contracts except under exceptional circumstances where it can be shown to be in the public interest (European Commission 1997). As is the case in the United Kingdom, the contracting parties will agree on whether references will be provided or not, those references will certainly evaluate the quality of the work, and the employee has the right to redress if he believes a reference was unfair or untrue (European Commission 1997, 60).

It is very easy for employees to terminate their employment with minimal notice and only slightly more difficult for employers, who must at least show cause. There are very few rules limiting the employee's actions and the external labor market is robust.

5.1.2.2 Military Contracts

Before 1994, young people enlisting in the Irish Defence Forces signed on for a three-year period in active duty (Permanent Defence Forces – PDF) and then six or nine years in the Reserve Defence Forces (RDF) for a total of twelve years. Since 1994, the respective periods have been five years in the PDF and seven years in the RDF (DFR A 10: Part I para 8). Anyone wishing to stay on active duty for the full 12-year period can apply for extension. Any time after a period in service of nine years, an enlisted person may apply for a re-engagement for service up to a total of 21 years (DFR A 10: Part I para 10). Enlisted personnel may also, at the 18 or 20 year mark (depending upon certain conditions), apply for a continuance of service, which may be granted in two-year segments beyond the 21-year mark, up to a normal maximum age of 60.¹⁸

Although Ireland does not require continuous promotion to remain in service, a failure to gain promotion will sometimes have an impact on whether an individual is granted an extension or continuance. This is due both to the fact that older personnel

¹⁸ Minor exceptions for short periods are allowed to the age rule for pensioning purposes. See DFR Part I para 11C. Enlisted personnel who attend the Apprentice Schools (of the Army, Navy, or Air Corps) are obligated to nine years active duty in the PDF and three years reserve duty in the RDF (pamphlet “Apprenticeships in the Army” issued by the Recruitment and Competitions Office 2006).

may not be capable of maintaining the physical fitness required for lower-ranking tasks, and to the fact that the Army needs to open up spaces for promotion for younger, more ambitious personnel and maintain the rank profile.

All Army officer cadets receive a “commission without limitation as to time”, which they can technically resign at any time.¹⁹ However, any officer who attends university through the Army must sign an undertaking that he or she will serve three years for every one year of full-time education. That obligation commences on the completion of full-time education. Should officers choose to resign their commissions before they have served their obligations, they must repay all costs of tuition and training. In the case of Air Corps cadets especially, these costs could conceivably be very high.

Probationary Periods

Enlisted recruits have a period of three months following their attestation (swearing-in) in which both they and the Army are free to decide that their match with the organization is poor (DFR A10 Part I para 22(1); DFR A10 Part III para 58). The Army has up to one year to determine that an individual is “not likely to become efficient” and

¹⁹ Officers commissioned into the Army’s Air Corps are given a limited 12-year commission, which they may apply to extend to an “unlimited” commission within the three-month period before it expires. Naval officers receive an initial short service commission of three years, which they can apply to have changed to an unlimited commission if they progress satisfactorily.

discharge him or her on those grounds. As officer cadets are enlisted personnel for the duration of their 15-month officer training, the same probationary rules apply to them.

Separation

Enlisted soldiers wishing to “extend” or “continue” their service beyond five or 12 years (respectively) must apply, and those applications may be turned down, either due to the Army’s low demand for that particular person’s skills, the individual’s lack of physical fitness, or the individual’s less-than-exemplary behavior (Administrative Instructions A10 Personnel: 229 230).

- Voluntary Separations

Enlisted members of the Irish Defence Forces still retain the option of purchasing a discharge. Recruits who wish to leave before the end of three months pay a nominal fee. All others pay a somewhat more substantial (but still feasible) fee which is scaled depending on their rank, years in service, and any special skills training they may have acquired through the military (see DFR A10 Part III para 61). Special skills training tends to increase the fee, increasing rank and years in service tend to decrease it. This is clearly designed to provide an incentive for younger, highly skilled people to stay. There is no notice period; individuals are discharged as soon as the paperwork is processed.

Discharge may also be requested by the individual on compassionate grounds (DFR A10 Part III para 54, 58); such a discharge will be granted only if the individual

and his next of kin can demonstrate that they are unable to purchase a discharge for him/her. Women may apply for a discharge if they wish to get married or if they become pregnant (DFR A10 Part III para 58(y), (z)). It is also possible for a serving member of the Defence Forces to ask for a premature (up to three months) discharge in the event that he or she has secured employment in the police, the fire service, the prison service, or any other civil service job (DFR A.10 Para 58 (k); Administrative Instructions A10 Personnel: Sec 2, 406).

Officers, apprentices, and any others who may have undergone special schooling or training must refund the Army the cost of that education if they wish to leave the service before their obligations are fulfilled. Aside from that provision, officers are essentially free to resign their commissions at any time, subject to the Minister of Defence accepting the resignation.²⁰ In this case, too, there is no notice or waiting period except the length of time the armed forces need to out-process the individual.

There was a change of pension rules in 2004, and all officers who joined the Defence Forces before April 2004 are subject to the old rules: officers resigning with between five and twelve years of service do not qualify for a pension, but will receive a small “gratuity” based on the number of years of service. The pension point for these officers is twelve years of service; after twelve years they are considered to be “retiring”

²⁰ The Minister has in fact refused to accept a resignation on grounds of ‘exigencies of the service’ (Egan v. Minister of Defence), and his action was upheld by the high court on appeal.

rather than resigning. Officers who joined the service after April 2004 are entitled to a full pension only at age 50, with benefits accruing to the maximum over 30 years. Officers who leave before 20 years of service receive no pension and are considered to have resigned. Officers leaving between 20 and 30 years of service are “retiring” and will receive a pro-rated pension upon turning 50 years old.

- *Involuntary Separations*

The grounds for extraordinary involuntary separation in Ireland are similar to those in the United Kingdom: those associated with criminal or disciplinary proceedings (including fraudulent or otherwise improper enlistment), and those associated with physical or mental health go without saying. Unlike the UK, Ireland has one catch-all paragraph to cover both redundancy and all other grounds which are simply in the interests of the service. This paragraph allows the Army to discharge enlisted persons on the grounds that their “services [are] no longer required”. It applies ostensibly to anyone whose discharge is clearly in the interests of the service but which does not fall under any other paragraph. This can include persons who are simply inefficient or whose conduct ratings consistently fall below “good”, as well as persons who are superfluous due to restructuring (DFR A10 Part III para 58). It is not unusual for the PDF to use these regulations to separate enlisted personnel.

Officers are in a different position. The Defence Force Regulations (A15 Part III para 18) provide for some grounds (other than age) on which officers may be separated,

but it is difficult for the Army to “fire” officers who are not guilty of any gross disciplinary or criminal violation. Officers may ostensibly be separated or retired from the service if they fail to maintain physical or mental health to the required standard, for misconduct or inefficiency, or in the interests of the service. Such separation/retirement cannot legally be carried out until the officer has been warned and been given the opportunity to respond to the warning, and is in practice extremely rare and difficult. Furthermore, although there is no explicit legal bar to making officers redundant, the Defence Forces are of the opinion that the post-WWII practice of granting unlimited (as opposed to short service) commissions means that officers cannot be made redundant (correspondence with Cmdt Gerry Cooney and Cmdt Gerry Lane, 30 Jan 2007). The PDF has undergone two reduction/restructuring periods since 1990: one from 1997 to 2000 (from 12,750 to 11,500), and one beginning in 2000 requiring a further cut of 1,000 personnel to a strength of 10,500 active duty personnel. These were effected primarily through voluntary early retirement with generous benefit packages, and partly through less recruiting, but not through involuntary redundancy.

Promotion

As a general rule, the individual must actively seek promotion in the Irish Defence Forces. For both officer and enlisted, promotion depends largely upon individual initiative in attending the necessary training and applying for higher

positions as they open up. Commanding officers have a duty to counsel their subordinates on career management, but promotion is not necessary for continued service except insofar as it affects retirement ages and applications for extension/continuance.

There are mandatory retirement ages staggered by rank. This should not be regarded as equivalent to the American “up-or-out” system, as the retirement ages are extremely generous and allow (for example) someone to remain in service at the rank of Second or First Lieutenant to the age of forty-seven.²¹

5.1.2.3 Summary

Table 15 shows that there are indeed multiple points of structured organizationally-controlled (ordinary involuntary) exit for enlisted personnel in Ireland, but not for officers (TC1). Officers are in fact very difficult to get rid of in terms of both ordinary and extraordinary involuntary separation (TC1a). The individual’s points of voluntary exit are largely unstructured: once the obligation has been fulfilled, the individual is free to leave at a time of his or her own choosing (TC2). Provided the service obligation has been fulfilled, it is much easier for the individual to leave service voluntarily than for the Army to discharge him involuntarily. The long probationary

²¹ Captains must retire at 54, Commandants at 56, Lieutenant Colonels at 58, Colonels at 60, Brigadier Generals at 61, Major Generals at 62, and Lieutenant Generals at 63. For Lieutenants who served as enlisted personnel prior to being commissioned, the retirement age is 53. For Professionally Qualified and some Technical officers (medical, dental, legal, engineer, psychologist, band), the ages are 64 for Captains and 65 for Commandant through Colonel (the highest rank such officers can achieve) (DFR A15 Part III para 14).

period gives the military some flexibility to fire incompetent or unruly personnel. Both voluntary and involuntary separation are more difficult in the military than in the civilian economy (TC4 and 5). Although extraordinary involuntary discharge may be used to manage the personnel profile in the enlisted ranks, even there the Army prefers to induce voluntary separation by generous benefits packages. Retirement ages are staggered by rank, but their compression at the high end of the age spectrum indicates that this acts more as an incentive to seek promotion than as an organizational slimming tool. This often presents the Army with problems in the age and rank profile, and can be especially problematic in that it blocks promotion opportunities for younger people.

Table 15: Summary of Separation Factors Ireland

	Points of Organizational Control over Exit	Points of Individual Control over Exit	Ease of Voluntary Separation	Ease of Ordinary Involuntary Separation	Ease of Extraordinary Involuntary Separation
Enlisted	1. end of initial obligation at 5 yrs (to reserves) 2. end of initial contract at 12 yrs 3. end of extension at 21 yrs (max) 4. + end of each 2-yr continuance (up to age 60 = up to ten/eleven)	Unlimited after obligation (subject to payment or notice and acceptance)	High (after obligation is fulfilled)	Medium	Medium-Low
Officers	1. mandatory retirement age by rank	Unlimited after obligation (subject to notice and acceptance)	High (after obligation is fulfilled)	Low	Low

5.1.3 The United States

5.1.3.1 Terms of Contract and Separations in the Civilian Economy

The USA is still the most extreme example of a country which practices at-will employment, and there are very few rules protecting either the employer or the employee (Berkowitz and Reitz 2006, 205). In cases of redundancy at firms with more than 100 employees, the employer is required to give 60 days notice (International Labour Organization 2000, 355f.), but that is essentially the only legal requirement. The parties are free to make contracts with other terms, but in most cases the employer will be in the more powerful position. Anti-competition clauses are very rare.²² Fixed-term contracts, however, can generally be terminated only for cause, and the contracting language may in fact provide employees with levels of protection much higher than the employer intended (Berkowitz and Reitz 2006, 206). References function the same way they do in Ireland and the United Kingdom: they are expected to deal with the quality of the individual's work and to show reasonable familiarity with the employee's character and capabilities. Probation periods are widely used but not regulated by statute. There are no rules limiting the use of fixed-term contracts.

The lack of protection for employees in the USA means that American employers are in a very strong position compared to their counterparts in other countries. Anti-

²² Although Blainpain et al. (2007, 1) indicate that their use may be increasing in the USA, there is still almost no regulation on them.

discrimination law prohibits employers from firing individuals for attributes or beliefs, but otherwise the employer's latitude to fire is wide. American employees have a great deal of freedom to exercise the exit option, but less job security than employees in other countries.

5.1.3.2 Military Contracts

The terms of enlistment for the American Army tend to fluctuate frequently, as only broad minimum and maximum limits are set by law and the rest is sensitive to the market. The periods of initial enlistment available are two to six (2-6) years,²³ and currently (as of winter 2006/07), the average period actually taken by recruits is a three-year contract. Contract lengths are associated with different levels of cash signing bonuses and deferred educational benefits. The recruit gets to choose his or her package, determining both the preferred length of the contract and the preferred mix of signing benefits (interview with Sergeant Braga, 23 Jan 2007). At any time between 24 months and three months prior to the expiration of their enlistment contracts, enlisted soldiers who have not reached their Retention Control Points (RCPs – see below under

²³ These are the minimum and maximum limits as set by statute (10 U.S.C. § 505(c)). Within these limits, the period of contract is at the discretion of the service. Many people actually sign reserve enlistments, which involve a combination of years of active duty and years in the reserve. These may be for between six and eight years, with the first two years spent on active duty (10 U.S.C. § 12103(b)).

“Promotion”) may apply for re-enlistment.²⁴ The term of re-enlistment may be anything from two to six years and is up to the soldier, but the expiration of the new enlistment term may not be earlier than the expiration of the old enlistment term would have been.

Enlisted soldiers with ten years of active federal service and the rank of Staff Sergeant (E-6) or above who choose to re-enlist do so on an indefinite contract (see AR 601-280, para 3-16) rather than a 2-6 year limited contract. The indefinite contract automatically sets the end of their contract periods to the appropriate Retention Control Points. Soldiers on indefinite-term enlistment contracts may apply for voluntary discharge at any time, provided they are not under any remaining service obligations from e.g. promotion or special training.

Officers serve at the pleasure of the President and their commissions are not *a priori* limited by time. Most officers will be obligated to four or five years of service following ROTC or the US Military Academy (respectively). Those going through Officer Candidate School are obligated to three years of service. Officers, like their colleagues in the UK and Ireland, must act to resign their commissions or retire, if they wish to leave the service, and the President has the right to accept or to decline resignations or retirements. Otherwise, officers in the US Army enjoy high job security provided they can continue to be promoted regularly. Even if they cannot get promoted,

²⁴ In order to be eligible for re-enlistment, the soldier must be younger than 55 years old on the date that the new enlistment contract would *expire*. The only exception is for individuals who will have less than 20 years of active federal service by their 55th birthdays and can complete 20 years before their 60th birthdays; such individuals may be re-enlisted for the period necessary to reach 20 years and the pension point.

they have the security of knowing exactly when they have to leave the service, and that their jobs are safe up to that point. Except for promotion to First Lieutenant, which is done essentially by time in service (18 months as a Second Lieutenant), the promotion system is competitive and involves forced attrition (see below under "Promotion"). As long as an officer continues to be promoted, he can stay in the service up to the age of 64.

Probationary Periods

The obligation to service begins for an enlisted person as soon as he or she goes through the swearing-in process at the Military Entrance Processing Station (MEPS), and there is a two-week period at the beginning of training where the recruit may choose to drop out without penalty. Enlistees also have the right to a discharge if the Army is unable to fulfill material promises made to the recruit, such as a particular assignment or training.²⁵ Recruits are in probationary status for the first 180 days of continuous active duty service, and if they engage in minor misconduct, fail to adapt to Army life, or fail to show promise of useful and efficient service, they can be discharged involuntarily through an expedited process called Entry Level Separation. This process denies the individual the right to an administrative separation board or to appeal the decision, which are standard aspects of administrative separation after the probationary period.

²⁵ The soldier must apply for discharge within 30 days of the date when he or she discovers that the promise is not to be fulfilled. Even oral promises which are breached may be grounds for such a discharge, provided the soldier can prove that the promise was made and can show that the breach "affects the very essence of the contract" (TJAGS 1997 3-13). This is of course difficult to do in practice.

Recruits may also choose to leave during this 180-day period with no penalty, although they must go through official channels and cannot simply quit or leave the training area (either of these actions would be a disciplinary violation and subject to punishment). Recruits who express a desire to leave or who seem to be having problems adjusting will be counseled intensively in an attempt to retain them, and the decision whether to separate them or not will be taken by the unit's commanding officer in consultation with the training NCOs and often with medical personnel (interview with Peter Delorier, 08 February 2007).

Officer cadets are essentially on probation during the period of their training. Those attending West Point may choose to exit the program any time in the first two years without penalty. At the beginning of the third year, cadets are required to sign an undertaking that they will pay back the cost of their education should they drop out. ROTC cadets who are on scholarship may or may not be required to reimburse the Army the cost of their scholarships, depending on the circumstances of their leaving the program. Most voluntary leavers will have to reimburse the military the value of the scholarship (but not necessarily the training). Those who are discharged from the program involuntarily will also have to repay if the grounds for discharge are attributable to their fault (e.g. drug use), but not if the grounds were out of the cadet's control (e.g. training injuries). Failure to complete OCS usually does not carry a penalty. Commissioned officers are considered "probationary" for their first five years of active

service, meaning that slightly different and easier rules of involuntary discharge apply to them (TJAGS 1997, 2-44 n. 216).

Separation

In the United States, enlistment is considered to be “a transaction in which private right is subordinated to public interest” (Colonel Winthrop, *Military Law and Precedents* 1920, pg.538-39, quoted in TJAGS 1997, 3-1). This means that, while the individual is bound by the contract, the state (in the form of the Congress, which has Constitutional authority to raise armies) may alter the terms of the contract at any time and may revoke the contract without the individual’s consent.²⁶ This being said, it is of course in the best interests of the Army to be seen as a reliable employer, and the ability of the Army to separate soldiers involuntarily is governed by statutes passed by Congress to safeguard individuals’ rights and interests to the extent that that is compatible with national security.

An officer’s commission is different from enlistment, in that the officer serves at the pleasure of the President. In effect this means that an officer may resign his

²⁶ The President and the Secretary of the Army have the power to alter the terms of enlisted contract *only* by virtue of statutes passed by Congress. They have no authority over such contracts in their own right. The JAG School text (TJAGS 1997, 3-2 n. 4) mentions the example of 10 U.S.C. § 1169, which grants authority to the Secretary of the Army to “prescribe policy and procedure for the discharge of enlisted personnel before the expiration of the enlistment”.

commission at any time following the period of obligation, but that resignation may or may not be accepted.

- Voluntary Separation

Enlisted personnel in the United States do not have the ability to buy a discharge, nor may they simply give notice, as in Ireland or the UK. When the term of enlistment is up, they may choose not to re-enlist. Soldiers may request a discharge before the end of their obligations on hardship or dependency grounds (similar to the “compassionate grounds” allowed in the UK and Ireland). Soldiers may also apply for a discharge on the grounds of conscientious objection, but it must be a sincere objection to military service of all kinds, not objection to a certain operation or a certain type of service. Female enlisted soldiers may request separation on grounds of pregnancy, but are not required to do so. All these are exceptional circumstances and it is in general difficult to get out of an enlisted contract before its term is up. The severity of this rule is somewhat mitigated by the short duration of most such contracts and by the fact that the individual him- or herself chose the length of the contract.

Enlisted personnel serving on indefinite-term contracts are bound to service only by particular obligations incurred through promotion or training; otherwise their freedom to leave is basically unlimited, and they need not respect a notice period. Soldiers with between 20 and 30 years of service may request retirement, the award of which depends upon the decision of the Secretary of the Army. Refusal to grant

retirement is usually exceptional and based on national security requirements. Soldiers with 30 years of service or more must be retired if they request it.

Technically, officers may tender their resignations at any time. However, their resignations are unlikely to be accepted by the Secretary of the Army if they have not yet fulfilled their obligations. Once their obligations are fulfilled, they may submit their resignations at any time, subject to the approval of the Secretary of the Army. The pension point, and the point at which an officer may “retire” as opposed to “resigning”, is twenty years of active service.²⁷ Officers with at least twenty but less than 30 years of service may request retirement but are not entitled to it; should their retirement be approved they will have full pension benefits (delayed until normal retirement age). Officers with thirty years of service may be retired upon their request with the consent of the President. An officer with 40 years of service must be retired upon his request.

- Involuntary Separation

The U.S. Army categorizes grounds for extraordinary involuntary discharge under the headings of performance-related (inefficiency or disability), conduct-related (misconduct), and status-related (age or failure to achieve promotion). Discharges from the enlisted ranks can be “honorable”, “general”, “other than honorable”, “entry level separation”, “bad conduct”, or “dishonorable”. A “bad conduct” or “dishonorable”

²⁷ This is an oversimplification for the purposes of clarity. There are in fact more than 20 statutes regulating the retirement – both voluntary and involuntary – of Army officers. As the details are not material to this study, they will not be discussed. See for reference Army Regulation 600-8-24 “Officer Transfers and Discharges”.

discharge is possible only by sentence of a court-martial – i.e. for serious disciplinary or criminal infractions. Commanders may discharge soldiers for patterns of minor misconduct, or even serious offenses which are not sent to court-martial, and those will usually be characterized as “other than honorable” and must be preceded by counseling and rehabilitation efforts. Any proceedings for discharge based on more serious misconduct need not be preceded by counseling. “Entry level separation” is the characterization for any administrative separation which takes place within the soldier’s first 180 days of active duty. Female enlisted soldiers who become pregnant during this period will be involuntarily discharged if the pregnancy interferes with their training (or if training constitutes a danger to the health of the mother and/or the child). These entry-level discharges are simpler and easier than the others, although the soldier’s superiors are required to counsel him or her on rehabilitation options (TJAGS 1997, 3-37f.).

Soldiers may be discharged for “unsatisfactory performance” as determined by their commanding officers, but before such discharges can be effected the commander must have provided the soldier with counseling and a meaningful opportunity for rehabilitation. Those discharges will be characterized either as “honorable” or “general”. Soldiers could also be discharged for structural downsizing reasons, but because terms of enlistment and re-enlistment are so short, it is usually sufficient not to approve applications for re-enlistment.

Officers' separations may be characterized as "honorable", "general", or "other than honorable". Where enlisted personnel (and warrant officers) may receive "dishonorable" or "bad conduct" discharges, officers may be "dismissed" from the service if they are sentenced by a general court-martial (i.e. the highest form of court-martial, used for serious crimes/felonies) or on the orders of the President during war-time (MCM 1003(b)(8)).²⁸ Officers may also be "eliminated" on grounds of e.g. substandard performance, dereliction, or in the interests of national security; however, an officer being considered for elimination is offered the option of resignation, retirement, or discharge at multiple points in the process and elimination is extremely rare (TJAGS 1997, 2-44).

There are a number of regulations covering the mandatory retirement of officers. Officers may be mandatorily retired in lieu of a discharge for disciplinary reasons, on grounds of Early Retirement Boards, a reduction in force, maximum service, or maximum age (AR 600-8-24 6-13(a)(3)).²⁹ The Secretary of the Army has the authority to convene a board to select individual officers for mandatory early retirement, for example to deal with superfluous personnel.

²⁸ Any officer ordered dismissed by the President may request trial by general court-martial instead.

²⁹ See also below under "Promotion". Major Generals must retire upon five years in grade or 35 years of service, whichever is later, and Brigadier Generals have five years in grade and 30 years of service, whichever is later. A Colonel is retired with 30 years of service, and a Lieutenant Colonel with 28 (See AR 600-8-24 6-27). There is a requirement that all officers be mandatorily retired at age 62, but due to the nature of the up-or-out promotion system, this happens only very rarely (TJAGS 1997, 2-34). The President may extend anyone with the rank of Major General or above to the age of 64, and the Secretary of the Army may extend certain medical officers to age 68 (AR 600-8-24 6-25(a), (c), (d)).

Promotion

In the enlisted ranks, promotion from E-1 through E-3 is done by time in service and is automatic unless the person has actually engaged in misconduct. Promotion to E-4 and E-5, the first two NCO ranks, is also done by time in service, but is no longer automatic. All personnel receive a score based on their physical fitness, marksmanship, and other job- and service-loyalty-related issues. The service will usually establish a minimum passing score, and all those whose scores fall above that line will be promoted. Beginning with promotion to E-6, the process becomes exactly like that for commissioned officers (see below) with annual fitness reports and a promotion board.

Promotions are done by vacancy in occupation, which means that it may be much slower and more difficult in smaller fields because there are fewer high-ranking jobs. Enlisted personnel are subject to “up-or-out” rules similar to those governing the officers, although the fact that enlisted personnel are on contract changes the dynamic slightly. The enlisted system functions through Retention Control Points (see Table 16).

Table 16: Army Enlisted Retention Control Points

Rank	Total Active Service In Years
PVT-PFC (E-1 - E-3)	8
CPL/SPC (E-4)	10
CPL/SPC (promotable)	15
SGT (E-5)	15
SGT (promotable)	20
SSG (E-6)	22
SSG (promotable)	24
SFC (E-7)	24
SFC (promotable)	26
1SG/MSG (E-8)	26
1SG/MSG (promotable)	30
CSM/SGM (E-9)	30
CSM in Nominative Positions (e.g. CSM of the Army)	35

These RCPs define the point at which an individual is no longer eligible for re-enlistment. Soldiers may still serve to the ends of their contracts beyond their RCPs, unless they are discharged involuntarily for administrative reasons, which could include incompetence. The maximum age for enlisted personnel is 55 years old, but most reach their RCPs before that point. The enlisted system is thus a combination of individual-determined contract periods, which are very difficult to exit voluntarily, and organization-determined RCPs dependent upon the individual's ability to get promoted.

For officers, promotion to First Lieutenant (O-2) is essentially automatic, barring any misconduct, and happens after about two years. First Lieutenants must have two years in grade to be promoted to Captain. Officers from Captain through Lieutenant Colonel may be considered for promotion only once they have served at least three

years in grade, and Colonels and Brigadier Generals must have at least one year in grade. Second Lieutenants not selected for promotion when they are in the promotion zone must be discharged from the Army within 18 months of the date they are found unsuitable for promotion. First Lieutenants through Majors, who are passed over twice for selection to be promoted, must be discharged (or retired, if eligible) within approximately seven months of the selection board's decision. Individuals ranked Lieutenant Colonel or above may be chosen by an Early Retirement Board for selective early retirement when they have been passed over for promotion (Lieutenant Colonels) or served three to four years in grade and are not selected for promotion (all higher than LtCol) (AR 600-8-24 6-29).

Promotion is competitive and similar to the British system in that it is largely at the prerogative of the organization. Individuals must take initiative to be well-prepared for promotion opportunities by attending courses and working to get appropriate postings, but they cannot apply for promotion. When they enter the "promotion zone" for a particular rank (defined primarily by time in grade), they will be considered against all the other officers in the same zone.³⁰

³⁰ While all the services have minimum time-in-grade requirements for entry into the promotion zone, those requirements fluctuate with service need. If the service needs – for whatever reason – to promote a large number of people to a particular grade it may look at less senior year-groups.

5.1.3.3 Summary

The US Army features a very large number of points of organizational control over exit (TC1). The number of points for enlisted separation is similar to that in the Irish Permanent Defence Forces, but significantly greater than in the UK. The number of points for officer separation, due largely to the up-or-out system, is far greater than for either of the other LMEs. Voluntary exit for officers is similar to both the UK and Ireland in that it is unstructured and unlimited once the obligation is fulfilled. Options for enlisted personnel are somewhat more structured: enlistment contracts tend to be very short and their duration is determined largely by the employee, but they are also difficult to get out of (TC2).

Voluntary separation (TC4) for officers is easy, although somewhat more difficult than it would be in the civilian sphere. Voluntary separation for enlisted personnel is not as easy, but as they have greater control over their contracts in the first place, the situation cannot be considered too harsh. It is much more difficult for enlisted personnel to separate from the military voluntarily than would be the case with a civilian employer. Extraordinary involuntary separation (TC5) is somewhat easier for enlisted than for officers; in both cases it is more difficult than it would be for a civilian employer, and in both cases it is somewhat easier than in either the UK or Ireland. In short, it is possible and effective, but not the Army's first choice, to use extraordinary involuntary separation to shed ineffective employees. Both the modularity and

flexibility of enlisted contracts and the forced attrition aspect of promotions provide the U.S. Army with personnel management tools beyond simple involuntary discharge.

Officers' commissions are unlimited in theory, but the up-or-out system means that job security is not uniformly high. Because of this, many officers choose to leave the service at the pension point (twenty years) rather than stay to mandatory retirement points. Promotion is competitive, at the prerogative of the organization, and the Army uses it actively as a tool for managing the age and rank profile.

Table 17: Summary of Separation Factors United States

	Points of Organizational Control over Exit	Points of Individual Control over Exit	Ease of Voluntary Separation	Ease of Ordinary Involuntary Separation	Ease of Extraordinary Involuntary Separation
Enlisted	<ol style="list-style-type: none"> 1. end of 1st enlistment 2-6 yrs 2. end of 2nd enl. 4-12 yrs 3. end of 3rd enl. 6-15 yrs 4. end of 4th enl. 8-15 yrs 5. end of fifth enl. 10-15 yrs 6. all RCPs (up to 6 after 15 yrs) 7. mandatory retirement at age 55 (or 60 if eligible and needs extra time to reach 20 yr pension point) 	<ol style="list-style-type: none"> 1. end of enlistment contracts 2. unlimited on indefinite-term contract provided obligations are fulfilled 	Medium	High	Medium-High
Officers	<ol style="list-style-type: none"> 1. promotion to 1stLt 2. promo to Capt (two chances) 3. promo to Maj (two chances) 4. promo to LtCol 5. promo to Col 6. promo to flag rank 7. mandatory retirement 	Unlimited after obligation (subject to notice and acceptance)	Medium-High (after obligation is fulfilled; promotion carries admin obligation)	High	Medium

5.2 Coordinated Market Economies

5.2.1 Germany

5.2.1.1 Terms of Contract and Separations in the Civilian Economy

Decisions to fire employees in Germany take place cooperatively between the employer and the Works Councils (European Commission 1997, 52f.). As the Works Councils are usually just as interested in a company's profitability as the employers are, this is not a serious obstacle to firing people for serious incompetence or disruptiveness. However, the fact that the Works Councils are equally interested in job security means that their participation presents a significant barrier to firing people who are simply inefficient rather than grossly negligent or incompetent. Employers in Germany must give employees a minimum of four weeks and up to seven months of notice (depending on how long they have been employed) if they wish to terminate their employment (European Commission 1997, 29-30; International Labour Organization 2000). Once an employee has worked for an employer for six months, he or she cannot be terminated even with notice unless one of the three statutory grounds exists (breach of contract, incapacity, or redundancy) (Müller-Bonanni 2006, 80). The notice period, furthermore, is effective only from either the middle or the end of the month rather than the day it is given.

The rules on notice are strict for both employers and employees, and the latter must usually also give a minimum of four weeks' notice. If they have been employed for more than five years, employees must usually give at least six months' notice (European Commission 1997, 59). Extraordinary termination – encompassing both firing and resignation with no notice – is possible only under a compelling circumstance (European Commission 1997, 52f.).³¹ Furthermore, if an employee has a fixed-term contract, the employer may not fire the employee *except* in the form of a summary dismissal for a compelling reason (see sec. 626 Civil Code (*Bürgerliches Gesetzbuch*); International Labour Organization 2000, 156). It is also possible for the contracting parties to terminate the contract by mutual consent, but this will be upheld by courts only if it is truly mutual and voluntary on the part of the employee, and this is often interpreted very strictly (International Labour Organization 2000, 156ff.).

Employers have the ability to dismiss workers on the grounds of lack of capability or health to perform the work, employee bad conduct, or urgent redundancy situations. However, even when one of these grounds exists, dismissal is considered unlawful “if the worker can be transferred to a comparable job immediately or after reasonable training” (International Labour Organization 2000, 157). In practice, it is thus

³¹ Summary dismissal may be based only on “grave misconduct or incompetence of the employee, or severe economic circumstances unrelated to the behavior of the employee. However, the dismissal is only lawful if “in view of all circumstances of the case, and in evaluating the interest of both parties, it is intolerable for either of the parties to fulfill the contract until the period of notice.” (International Labour Organization 2000, 157).

very difficult to dismiss on these grounds. Payment in lieu of notice is not possible under German employment law (Müller-Bonanni 2006, 81).

Employers may hire people on fixed-term contracts for a maximum period of two years. It is possible to make shorter fixed-term contracts and renew them, but they may not be renewed more than three times and they may not be renewed for a period of longer than two years. Longer fixed-term contracts are possible only if there is compelling justification (such as a project), but such situations have proven difficult for employers to enforce in the courts (Müller-Bonanni 2006, 80-81). There is a statutory limit of six months on probationary periods, and fixed-term contracts of more than six months may not include a probationary period (European Commission 1997, 62). In effect, if an employee can stay employed for more than two years, he has an indefinite contract.

Anti-competition clauses are very common in Germany for employees at the *Techniker/Meister* level and above (i.e. skilled employees capable of training and supervising other skilled workers). These clauses usually stipulate that the employee cannot quit without the consent of his employer unless he agrees not to work in the same industry for a period of two years. Their purpose is to prevent poaching of both workers and ideas, and they weaken the external labor market seriously.

Employers are required by law to give a statement of the nature and duration of a former employee's employment (i.e. a reference). However, they will make comments

on the quality of the work only if the employee requests it, and while they may not lie, they also may not adversely affect the worker's chances on the job market. In short, if they cannot say anything good, they must refuse to comment on the employee's quality (European Commission 1997, 60).

The strong regulatory infrastructure surrounding employment in Germany encourages an internal labor market and long job tenure. It makes it unattractive and in some cases prohibitively difficult for an employer to improve the efficiency of his business by employee turnover. It also makes it difficult for employees to leave one job for another; individuals who are unhappy in their place of employment generally have to quit before they have secured alternative employment due to the long notice periods. It is somewhat more difficult for the employer to terminate the employment relationship than for the employee, but the employee has very little incentive to terminate the relationship.

5.2.1.2 Military Contracts

The possible terms of contract in the *Bundeswehr* are relatively well-defined and depend primarily on the track one wishes to enter, secondarily on the qualifications one brings to military service. The terms of contract available are for four, six, eight, or twelve years of service as a temporary-career soldier (*Soldat auf Zeit*), or service to retirement as a full-career soldier (*Berufssoldat* – in both these cases the word “soldier” refers to both enlisted and officers). As a general rule, those signing up for the

Mannschaften sign a four-year contract, those signing up as *Fachunteroffiziere* sign an eight-year contract, *Feldweibel* and officers sign twelve-year contracts. Individuals who already possess skills qualifications can often sign up for shorter contracts (four or six years instead of eight or twelve). The officer's contract includes the three-year period of university studies. Pilots and other specialists are usually obligated to longer periods of service, and those entering the *Unteroffizier* or *Feldweibel* tracks with higher ranks need obligate themselves only to a minimum of three or four years.³²

Promotion to the highest rank in any track usually requires one to sign a contract for a further obligation (e.g. to be promoted to *Oberstabsgefreiter* in the *Mannschaften*, one must have a service obligation of at least six years rather than four). Temporary-career soldiers may extend their contracts in blocks of anything from two to eight years, and may serve for up to 20 years maximum in that capacity, or to a maximum age of 40, whichever comes first (SG § 40).

Nearly all persons entering the *Bundeswehr* will do so in the status of a temporary-career soldier.³³ Individuals must apply during their service for a full-career

³² The law stipulates a minimum of three years; in practice, such individuals are asked to sign a four-year contract (SLV).

³³ The exceptions are pilots (who have a special contract which is limited by age but technically a full-career contract) and a tiny handful of officer applicants who may be offered full-career contracts upon accession (usually around 2-3% - applicants who did outstandingly well on the entrance tests). This early decision is not always desirable, as the contract is extremely difficult to break (Interview with *Oberst* Heinz Feldmann, 13 April 2006).

contract (a contract as a *Berufssoldat*), which guarantees employment to the required age of retirement (between 41 and 61 years old).

Those in the *Mannschaften* and *Fachunteroffizier* tracks may not become full-career soldiers; in order to apply for such a contract, one must be at least 24 years old and have reached at least the rank of *Feldwebel* (SLV § 21). Officers may apply for *Berufssoldat* status once they have finished their officer training, passed the officer exam, and achieved the rank of *Leutnant* (O-1, usually after about three years) (SG § 39).³⁴ In practice, the decision to seek *Berufssoldat* status or not is taken when an individual is between 28 and 31 years old, about three years before he or she would normally leave the service on his or her temporary contract (interview with Oberst Heinz Feldmann, 13 April 2006).

Probationary Periods

Temporary-career soldiers still in the first four years of their service can be separated administratively if they are unable to fulfill the requirements of their rank or track (one month's notice); however, if they are attempting to move up to a higher track from a lower, they will not be separated but rather returned to the lower track to finish their obligations. Temporary-career soldiers may be separated without notice during

³⁴ Certain professionally qualified officers may not become *Berufssoldaten* until they have reached ranks higher than *Leutnant* (SG § 39).

their first four years of service if they are guilty of negligence of duty, or if their presence in the *Bundeswehr* is likely to interfere with good discipline or to damage the organization's reputation (SG § 55(5)). A Lieutenant who has managed to get a full-career contract, but who has served less than three years as an officer and less than ten years total in the *Bundeswehr* can be administratively separated on the grounds that he is not suited to full-career status. In this sense, his three-year officer training period is probationary. In all cases, the individual must reimburse the *Bundeswehr* for any education or training he or she has received, and this can be extremely expensive.

Separations

Separations are not differentiated by officer and enlisted, but rather by whether an individual is a temporary-career soldier or a full-career soldier. Full-career soldiers must leave the service ("retire") when they reach the established age limits for their ranks, but otherwise need not worry about promotion or job security. Those who have not acquired full-career status generally leave when their temporary contracts expire. The following sections detail the legal grounds for separation, but it should be noted that both voluntary and involuntary separation for any reason other than serious disciplinary or criminal infractions, serious disability, or expiration of contract are extremely difficult and fairly rare.

- Voluntary Separation

As a rule, it is difficult for members of the German military to leave the service before their contract terms are expired. In all cases of both voluntary and involuntary separation with fault, service-members must reimburse all costs of training or education, and this is often prohibitive. Full-career soldiers who have not yet passed the 20-year service mark may apply to have their status changed to temporary-career soldiers (and thus be allowed to leave the service “early”); such requests will be granted only if it is in the interest of the Army. Full-career soldiers may also request separation, but if their service included academic studies or vocational training, they are eligible to request separation only after a period of service equal to three times the length of their training or education (a period not to exceed ten years) (SG § 46 (3)). Full-career officers who enjoyed neither academic nor vocational training may request separation after their sixth year of service *as officers* (i.e. after at least their ninth year of service). It is possible to make exceptions to these rules on grounds of hardship, similar to those in the LME countries discussed above, and temporary-career soldiers may also request separation on hardship grounds.

- Involuntary Separation

All full-career soldiers are subject to maximum age limits by rank. These range from 41 for fighter pilots and 53 for all non-commissioned officers to 61 for generals (SG

§ 45).³⁵ There are some exceptional provisions to allow either the individual or the Ministry to prolong service for between one and four years beyond the relevant retirement age, but always in the interests of the service. The individual must be given 12 months' notice that he or she is to be retired on a certain date. The Federal President (*Bundespräsident*) can order flag officers (Brigadier General and higher) into retirement before the age limit has been reached, if he sees fit (SG § 50).

Both full-career and temporary-career soldiers will be separated (*Entlassen*) if they lose their status as German citizens, if irregularities with their entry into service are discovered and persist, or on other grounds which would tend to make their military status invalid (SG § 46, 55). Soldiers will also be discharged (*Verlust der Rechtsstellung eines Berufssoldaten*) in connection with serious criminal or disciplinary infractions (SG § 38, 48). Redundancy is extremely difficult to effect, as is separation for anything like minor disciplinary breaches or inefficiency once a soldier or officer is beyond the probationary period.

Promotion

Promotion in the *Bundeswehr* for both temporary-career and full-career soldiers is by vacancy and on merit. There are a number of requirements regarding minimum time-

³⁵ Colonels (*Oberst*) must retire at 60, Lieutenant Colonels (*Oberstleutnant*) at 58, Majors (*Major*)/Staff Captains (*Stabshauptmann*) at 56, Captains (*Hauptmann*), 1st Lieutenants (*Oberleutnant*), and 2nd Lieutenants (*Leutnant*) at 54, all non-commissioned officers (*Feldwebel* all ranks) at 53, and all fighter pilots at 41.

in-service and minimum time-remaining-on-contract. In general, this means that those who wish to be promoted to certain ranks must sign on for longer than the average contract, but those who sign on for longer contracts need not necessarily be promoted. Officers hold enlisted ranks for the first three years of training and are promoted to Second Lieutenant (*Leutnant*) upon successful completion of officer training.

The *Bundeswehr* regulations on promotion note that all of the minimum time-in-service requirements are the bare minimum and that it will normally take much longer for an individual to be promoted (ZDv 20/7 115). A normal timeline progression is to get First Lieutenant after about three years as a Second Lieutenant, Captain at about eight years, and Major at about thirteen (interview with Oliver Rodewald, 04 August 2005). This means in effect that those wishing to be promoted to Major will usually have to seek a full-career contract, and the *Bundeswehr* can of course refuse to approve the application. Individuals may also object to being promoted, in which case they will cease to be eligible for promotion (ZDv 20/7 131). While individuals may express a preference for a particular posting, the final decision on appointments is always made by the personnel planning office.

5.2.1.3 Summary

The first hypothesis above predicted that LME militaries would rely primarily on structured points of organizationally-controlled exit, while CCMEs would be less likely to feature such options or would feature fewer. The German system features the same or

fewer points of organizational control than the American or British systems for both officers and enlisted, and fewer points of control for enlisted than the Irish system. Although German contracts are modular and present opportunities for the organization not to renew the employment relationship, they are also essentially its only tool for ordinary involuntary separation. The *Bundeswehr* does not have an up-or-out promotion system, nor does it have restrictive retirement ages. While retirement ages are staggered by rank, no one except fighter pilots is required to retire before age 53. In fact, the German mandatory retirement scheme looks strikingly like that of the Irish, being slightly more restrictive on enlisted personnel and slightly less restrictive on low-ranking officers.

Hypothesis TC2 indicated that CCME militaries should be less likely than LME militaries to allow individuals essentially unstructured opportunities to leave the service. This expectation appears to be borne out, as it is very difficult for an individual to leave at any time other than the end of his or her contract. These contracts are less flexible than those offered in the United States, and more difficult to exit than those in any of the LMEs with the possible exception of the USA (enlisted). While it is possible for *Berufssoldaten* to leave the service on completion of all obligations, it is generally an unattractive option.

Hypothesis TC3 predicted that militaries in CCME contexts ought to be able to offer fixed-term contracts for far longer periods than was allowed in civilian settings.

This is supported by the evidence. The military offers multiple contracts of more than two years' duration which are nonetheless not indefinite.

Hypotheses TC4 and TC5 referred to the relative ease of voluntary and involuntary separation in firms and militaries. Voluntary separation is approximately the same as in the German private sector, perhaps slightly more difficult. Firing in the military, like quitting, seems to be slightly more difficult than in the civilian economy.

Table 18: Summary of Separation Factors Germany

	Points of Organizational Control over Exit	Points of Individual Control over Exit	Ease of Voluntary Separation	Ease of Ordinary Involuntary Separation	Ease of Extraordinary Involuntary Separation
<i>Mannsch.</i>	<ol style="list-style-type: none"> 1. end of first contract at 4 yrs 2. end of 2nd contract at 6-12 yrs 3. end of 3rd contract at 8-20 yrs 4. end of any further contracts less than 20 yrs 	Same as points of organizational control	Low	Medium	Medium-Low
<i>Unteroff.</i>	<ol style="list-style-type: none"> 1. end of first contract at 8 yrs 2. end of second contract at 10-16 yrs 3. end of third contract at 12-20 yrs 4. end of any further contracts less than 20 yrs 	Same as points of organizational control	Low	Medium	Medium-Low
<i>Feldwebel</i>	<ol style="list-style-type: none"> 1. end of first contract at 12 yrs 2. end of second contract at 14-20 yrs 3. end of any further contracts less than 20 yrs 4. 20 yr point for SaZ 5. mandatory retirement at age 53 for BS 	Same as points of organizational control	Low	Medium	Low
Officers	<ol style="list-style-type: none"> 1. end of first contract at 12 yrs 2. 20 yr point for SaZ 3. mandatory retirement at age in rank 	Same as points of organizational control	Low-Medium	Low	Low

5.2.2 The Netherlands

5.2.2.1 Terms of Contract and Separations in the Civilian Economy

The Netherlands has the most restrictive firing and quitting practices of any of the countries in this study (Govaert and Sneek 2006, 160).³⁶ Unless the employee can obtain the employer's consent for mutual termination of the contract, he or she must get the permission of the Central Organization for Work and Income (*Centrale Organisatie Werk en Inkomen* – CWI) to resign, and must respect a period of notice equal to one pay period (unless there is a compelling reason for immediate effect). Employees must give between one and six weeks' notice to terminate a fixed-term contract, depending on how long the period of employment has been. Employees who have been continuously employed by the same employer for at least five years (i.e. who have an indefinite contract) may terminate the contract by giving six months' notice (Govaert and Sneek 2006, 161).

Any employer who wishes to terminate an indefinite-term contract must obtain the permission of the CWI, it must be for cause, the cause must be substantiated, and "it is not uncommon for a permit to be refused" (Grapperhaus and Verburg 2002, 30f.; Govaert and Sneek 2006, 161). Employers must provide a minimum of one week's notice to terminate an employee, and may have to provide up to 26 weeks of notice depending

³⁶ Note, however, that on both ranking systems compared by Nicoletti et al. (2000, 51), Germany was ranked as providing more employment protection overall than the Netherlands. In comparison with LMEs, both Germany and the Netherlands feature very high employment protection.

on the length of the employee's tenure (European Commission 1997, 29-30; International Labour Organization 2000). Currently, this period cannot even begin until the permission of the CWI has been obtained, making the total time costs even greater.

The maximum probationary period is two months, and length of probation depends on the time period for which the contract has been concluded. Contracts for less than two years may have a probation period of one month, maximum. Contracts for two years or more may have up to two months. "During this trial period, either party may terminate the employment agreement without prior notice and without a CWI permit" (Grapperhaus and Verburg 2002, 17).

Fixed-term contracts expire at the end of the term without notice. However, if both parties continue the employment relationship, the contract is considered by law to have been renewed for the same term and under the same conditions as the original contract but with a maximum duration of one year. Such extensions may happen no more than twice and for no more than a total period of three years. Upon continuation of the employment relationship beyond either of these thresholds, the contract is considered indefinite and includes all rights associated with indefinite contracts.

Both employers and employees may terminate without notice for "urgent reasons",³⁷ but they will still need the permission of the CWI (International Labour

³⁷ Urgent reasons are defined as "such acts, qualities or behaviour of one party as make it unreasonable to expect the other party to allow the employment relationship to continue" (International Labour Organization 2000, 243; Govaert and Sneek 2006).

Organization 2000, 242f.; Govaert and Sneek 2006). Payment in lieu of notice is possible by mutual consent and in the context of an indefinite contract, but not a fixed-term contract. Contracting parties may agree on a probationary period not to exceed two months, and no notice is necessary within that period (European Commission 1997, 64).

Anti-competition clauses are in use in the Netherlands, and function similarly to those in Germany. Also as in Germany, the practice of giving references is mandated by law, but includes only the duration and nature of the employment. If the employee requests an evaluation of the quality of his or her work, the employer ought to give it unless he believes it would be detrimental to the worker's chances for re-employment (European Commission 1997, 60).

In short, the Netherlands features a regulatory structure similar to that of Germany, and in some senses even more restrictive. It is very difficult for both employers and employees to terminate the employment relationship, and the system defaults to indefinite contracts. No worker may be engaged on a series of fixed-term contracts for more than three years. The external labor market is weakened and long job tenure and company loyalty are encouraged.

5.2.2.2 Military Contracts

Before 1993/94, under the system of conscription, most *Manschappen* in the Dutch military were short-service conscripts or persons serving with temporary-career (*Beroeps*

Bepaalde Tijd – BBT) contracts, at the end of which they might renew for a short time or simply leave service.³⁸ All *Onderofficieren* and Officers had full-career (*Beroeps Onbepaalde Tijd* – BOT) contracts, which guaranteed them employment until the retirement age (usually 50). The Dutch military began moving away from the conscription system in 1993/94, phasing all conscripts out and introducing a mixed system of some BBT (mostly *Manschappen* and some *Onderofficieren*) and some BOT by 1997/98. The final transition is scheduled to take place from 2005 to 2007, as the military implements a new system (interviews with 1stLt Boshouwers 13 June 2006; 1stLt Plaggenborg, 19 June 2006; Cyril van de Ven, 16 June 2006). It is calling this “up-or-out”, after the American system, but the Dutch practice will actually have far more in common with that of the Germans than that of the Americans.

The new system starts everyone – regardless of track – on a limited (BBT) contract. These contracts will be for between two and eleven years (see below), and can be extended until the individual reaches the age of 35. Unlike the old system, where BBT individuals had to apply to extend their contracts, this BBT contract will be automatically extended to age 35 unless the soldier acts to terminate it. During that period, the soldier is free to leave with notice comparable to the notice period expected in the private sector, but is guaranteed employment with the Army to age 35 (Atsma

³⁸ When the Netherlands maintained conscription, they had a provision similar to Germany’s which made it was possible for conscripts to volunteer to stay on longer (*Kort Verband Vreiwillige* – KVV). KVV could remain in service until 30 years of age – far longer than the *Freiwillig Zusätzlicher Wehrdienstleistende*.

2005). Individuals who wish to stay in past the age of 35 must apply for a full-career contract, and all individuals who are still in service at that stage will be evaluated as to whether they may stay or must go. This is of course very similar to the German system of temporary-career and full-career contracts, but with the decision on a full-career contract coming somewhat later than in Germany. There are no regulations similar to the American general requirement that individuals who fail to gain promotion be out-processed; the system is based entirely on age rather than rank (see also Atsma 2005).

Currently (as of winter 06/07), *Manschappen* generally sign on for a period of three years. *Onderofficieren* sign on for a five-year contract (those signing on for the medical corps sign a contract for minimum six and maximum 12 years). Officers doing the short model (*Opleiding Kort Model*) sign on for a five-year contract, their training lasts 1.5 years, and they cannot be promoted beyond the rank of Major. Officers doing the long model (*Opleiding Lang Model*) sign on for eleven years, their training lasts around four years (depending upon specialty), and they are eligible to be promoted without restriction. Those joining as officers who are already qualified at the post-secondary level (*Opleiding Post-Academisch*) also sign a contract for five years, but their training lasts only two years, and there is no limitation on their promotion chances.

Anyone who has managed to be retained to the age of 35 is eligible to apply for a full-career contract, regardless of his track; however, in order to *hold* such a contract, an

individual must be at least an *Onderofficier*. Thus *Manschappen* who wish to remain in service must apply to move up either to the *Onderofficier* or the Officer track.

Probationary Periods

Service-members in all three tracks are in a probationary status for the first six months of full-time service. During this time, either party to the contract may decide to terminate it on essentially any grounds. After this period has elapsed, the contract stands and must be fulfilled (AMAR 39(7)).³⁹

Separations

Military service in the Netherlands is called an *Aanstelling* (basically “appointment”), which means that the individual is bound by the terms of the contract, but the military organization can break it if necessary, and there is not much in the way of redress. As in Germany, however, it is in practice excessively difficult to separate personnel unless they have committed serious disciplinary or criminal infractions. This is true even for enlisted personnel (interviews with 1stLt Boshouwers, 13 June 2006; Cyril van de Ven, 16 June 2006). In effect, if the military does not wish to retain someone because of inefficiency or minor disciplinary problems, it will decline to renew his or her

³⁹ The law, the *Algemeen militair Ambtenarenreglement* (AMAR) from 1982 allows for a probationary period of up to twelve months (AMAR Art. 9), but allows the Minister to set the period within that limitation. The full text of the law is available on http://mpbundels.mindef.nl/31_serie/31_101/31_101_1210_inh.htm

contract at the up-or-out point. Before that, even at the end of the original contract period, as extension is largely automatic, it is still difficult to remove people from the organization.

- Voluntary Separation

Members of the military may request separation (AMAR 39(1)), and the burden of proof is on the military to show why the request ought to be rejected. However, one of the grounds on which such a request may be rejected is that the individual has not yet completed his or her service obligation, and in effect it is very difficult to obtain a voluntary separation before the obligation is fulfilled. If the armed forces have provided a person with training/education, the person is obligated to serve 1.5 times the length of the training period, and the initial contract period is obligatory. Once the obligation is fulfilled, however, only reasons of national security or emergency (e.g. if the individual's unit is engaged in operations at the time of the request) will suffice to justify a refusal.

- Involuntary Separation

The usual grounds of permanent physical or mental disability, gross negligence, misconduct, criminal conviction, or fraudulent enlistment (AMAR 39(2)(f), (k), (l), (m), (n)) are all available. Discharge for disability is characterized as "honorable" (*eervol*), while the others listed above are simply not characterized. The law also allows for other kinds of extraordinary involuntary separation, including in the interests of the service (AMAR 39(2)(c), 39(6)(a)), due to incompetence (AMAR 39(2)(d), (h), (j), and 43), and

due to mandatory retirement ages. These are all characterized as “honorable” (AMAR 41). The Dutch have carried out a few downsizing initiatives since the early 1990s, and involuntary separation of personnel due to redundancy has been permissible and necessary, but also difficult and painful (Moelker et al. 2005, 16).

Mandatory retirement ages in the Army usually range from 55-58 with full pension benefits (Interview with Major van der Veen, 12 June 2006; AMAR 39(2)(a)).⁴⁰ The Minister may also forcibly retire individuals over the age of 50 who are unable to fulfill their duties due to age (AMAR 39(2)(g)).⁴¹ The standard legal commentary on the Regulations on Military Personnel (AMAR) states that the four most common forms of involuntary discharge on special grounds (i.e. as opposed to mandatory retirement and expiration of contract) are physical/psychological disability, failure to meet the requirements of initial training, incompetence in one’s assigned function, and misconduct (Coolen 2005, 215). Even these are relatively rare.

⁴⁰ The military is currently extending mandatory retirement ages, and has therefore put a system in place whereby all personnel who received a full-career (BOT) contract before January 1st, 2002, and who had already reached the age of 55 by 2002, are subject to the following mandatory retirement ages: In 2002-2005, those turning 55 must retire; in 2006, those turning 55 and three months; in 2007, 55 and six months; in 2008, 55 and nine months; in 2009, 56; in 2010, 56 and three months; in 2011, 56 and six months; in 2012, 57; in 2013, 57 and six months (AMAR 39a(e)).

⁴¹ Normal retirement age in the Netherlands is 65 (Auer 2000, 75). Early retirement schemes allow people to retire between the ages of 60 and 64 (Grapperhaus and Verburg 2002, 25). This means that even with the reforms going up through 2013, military personnel are still going to be retired much earlier than most others, and will most likely have a very difficult time finding other work

Promotion

Promotion in the Dutch armed forces is done by vacancy and merit, but individuals must apply for particular vacancies (this is like the Irish system and unlike the British, American, and German systems). Minimum requirements relate less to time in grade than to “postings” – particular assignments of which an individual usually must have had two or three to be considered for promotion. This means that individuals need to be somewhat pro-active in seeking different jobs within the military in order to position themselves for promotion. The absence of a graduated retirement age based on rank, however, means that the bulk of the “work” of separating the productive from the non-productive will be done by the BBT to BOT selection process.

5.2.2.3 Summary

Even after restructuring, the Dutch system still features the fewest points of organizational control over employee separation (TC1). This is consistent with my expectations that CCME militaries will want to reduce uncertainty for their employees. However, the Dutch military does NOT structure exit at the individual’s initiative any more than the LME militaries did, contradicting the expectations of TC2. This represents a situation where the individual has extraordinary advantages over the institution, and is somewhat consistent with the high level of employment protection in the civilian economy, but inconsistent with expectations for militaries. In fact, the military may

allow the individual *more* freedom than he or she would have on the civilian side (also contradicting TC4).

Hypothesis TC3 is essentially supported, in that the BBT contract is a fixed-term contract for service of up to 18 years. Hypothesis TC4 on voluntary separation is not supported: voluntary separation from the Dutch military seems to be easier than it is in the Dutch civilian sector. Hypothesis TC5 on involuntary separation is supported, in that such separation from the military is approximately as difficult as it is in the civilian economy. Promotion is not linked to involuntary separation in an official and regulated way. An unpromotable individual who is expected to be unable to carry out his function due to age, for example, may not be granted a full-career contract, but there is no requirement that individuals who have failed to get promoted should be denied such contracts.

Table 19: Summary of Separation Factors Netherlands

	Points of Organizational Control over Exit	Points of Individual Control over Exit	Ease of Voluntary Separation	Ease of Ordinary Involuntary Separation	Ease of Extraordinary Involuntary Separation
<i>Manschappen</i>	1. up or out at 35 yrs old 2. mandatory retirement by age	Basically unlimited after obligation is fulfilled	High (after obligation is fulfilled)	Low	Medium-Low
<i>Onderofficiieren</i>	1. up or out at 35 yrs old 2. mandatory retirement by age	Basically unlimited after obligation is fulfilled and before up or out point; somewhat more difficult thereafter	Medium-High (after obligation is fulfilled)	Low	Low
Officers	1. up or out at 35 yrs old 2. mandatory retirement by age	Basically unlimited after obligation is fulfilled and before up or out point; somewhat more difficult thereafter	Medium-High (after obligation is fulfilled)	Low	Low

5.3 Discussion

A brief look at the alternative hypotheses indicates that the expeditionary vs. non-expeditionary variable does not seem to have much explanatory power (TC7). In neither the US nor the UK (expeditionary) is it the case that voluntary separation is more difficult than involuntary separation, provided the service obligation has been fulfilled (TC7a). Involuntary separation is somewhat easier in the USA and UK than in the non-expeditionary militaries, as predicted by hypotheses TC7a and TC7b, but overall the pattern actually seems to show the USA and Germany falling together as the only two countries where voluntary separation is not significantly easier than involuntary separation. In short, there is no obvious pattern linking Ireland with the Netherlands and Germany. The most interesting finding, in the author's opinion, is the extreme oddity of the Dutch system when compared to all the others.

The other alternative hypothesis, that all the militaries would look very similar (TC6) was borne out in the sense that, on some dimensions, the militaries look far more similar to one another than *firms* in LME and CCME countries do. For example, most militaries offer somewhat modular contracts, which are both longer than definite-term contracts in CCMEs are usually allowed to be and shorter than the preferred indefinite contracts. In LMEs, the level of job security in the military approaches CCME proportions, but would by no means satisfy an employee from a CCME (unless he had the luck to be an Irish officer). All the militaries use obligation periods to regulate

employee exit, which is not common in LME private sectors. Most also use some kind of probation period, often a longer one than provided for in civilian society. Many military rules on firing and quitting in LME countries look more similar to CCME practice – both civilian and military – than to LME civilian practice. In sum, militaries do indeed look more like one another than firms do, but there are still some serious differences which require explanation. It therefore remains to examine whether those differences fall in the directions predicted by my theory.

Hypothesis TC1 predicted that *contracts in LME militaries ought to feature a larger number of points where the organization has a structured opportunity to end the employment relationship, than contracts in CCME militaries*. In Table 20, we see that, except for the outlier of Irish officers, this pattern is generally true. The number of control points for enlisted personnel in the three LME militaries ranges from four⁴² to 12 (USA) or 14 (Ireland), while in the CCME militaries it ranges from two (in both Dutch enlisted components) to four or five (in Germany). For officers, the control points are four and seven for the UK and USA respectively, and three and two for Germany and the Netherlands respectively.

Hypothesis TC1a indicated that *extraordinary involuntary separation ought to be easier in LME militaries than in CCME militaries*. Based on the anecdotal evidence I was

⁴² Four is in fact a conservative estimate for the United Kingdom, as the control points at three, six, and nine years ought to be counted individually. I estimate low here because these control points are only semi-official and would take more action on the organization's part than the standard evaluation at eleven years or the end of the contract at 22 years.

able to gain through expert interviews, this was generally true, although it seems to be somewhat easier in the United States than anywhere else. In no case was such “firing” as easy as it is in LME private sectors.

Hypothesis TC 2 stated that *contracts in CCME militaries ought to be more likely than those in LME militaries to structure the individual's opportunities to leave the service voluntarily*. Table 20 indicates that none of the three LME militaries, with an exception for US enlisted personnel, imposes significant structure on the voluntary exit opportunities of their personnel. In other words, voluntary separation is easy and mainly incentive-based. This can be a serious drawback for the military if its incentives are inadequate to cause the right people to leave at the right time.

However, the Netherlands also do not structure their members' voluntary exit opportunities, although the up-or-out point is meant to give some structure to the individual as well as to the organization. Germany does structure individual exit. The hypothesis is thus only weakly supported due to the unexpected behavior of the Dutch military. It is perhaps interesting to note that the UK requires only notice for both enlisted and officers, while Ireland requires payment from enlisted personnel and neither notice nor payment from officers. The USA and the Netherlands require neither notice nor payment from eligible enlisted or from officers. Germany in effect requires notice from both limited-contract and indefinite-contract soldiers, if the individuals wish to take advantage of the *Bundeswehr's* retraining and resettlement programs.

Table 20: Summary of Control over Exit Points

		Points of Organizational Control over Exit	Points of Individual Control over Exit
UK	Enlisted	<ol style="list-style-type: none"> 1. control points at 3, 6, and 9 yrs 2. evaluation at 11 yrs (control point at 12 yrs) 3. end of contract at 22 yrs 4. mandatory retirement age 55 	Unlimited after obligation, subject to notice period (and acceptance)
	Officer	<ol style="list-style-type: none"> 1. end of SSC at 3 yrs 2. end of IRC at 13-16 yrs 3. with Reg C, failure to make promotion to Major 4. mandatory retirement age 55/60 (except MGen+) 	Unlimited after obligation, subject to notice period (and acceptance)
Ireland	Enlisted	<ol style="list-style-type: none"> 1. end of initial obligation at 5 yrs (to reserves) 2. end of initial contract at 12 yrs 3. end of extension at 21 yrs (max) 4. + end of each 2-yr continuance (up to age 60 = up to ten/eleven) 	Unlimited after obligation (subject to payment or notice and acceptance)
	Officer	<ol style="list-style-type: none"> 1. mandatory retirement age by rank 	Unlimited after obligation (subject to notice and acceptance)
USA	Enlisted	<ol style="list-style-type: none"> 1. end of 1st enlistment 2-6 yrs 2. end of 2nd enlistment 4-12 yrs 3. end of 3rd enlistment 6-15 yrs 4. end of 4th enlistment 8-15 yrs 5. end of 5th enlistment 10-15 yrs 6. all RCPs (up to 6 more <i>after</i> 15 yrs) 7. mandatory retirement at age 55 (or 60 if eligible and needs extra time to reach 20 yr pension point) 	<ol style="list-style-type: none"> 1. end of enlistment contracts 2. unlimited on indefinite-term contract provided obligations are fulfilled
	Officer	<ol style="list-style-type: none"> 1. promotion to 1stLt 2. promotion to Capt 3. promotion to Maj 4. promotion to LtCol 5. promotion to Col 6. promotion to flag rank 7. mandatory retirement 	Unlimited after obligation (subject to notice and acceptance)

Germany	Mannsch.	1. end of 1st contract at 4 yrs 2. end of 2nd contract at 6 to 12 yrs 3. end of 3rd contract at 8 to 20 yrs 4. end of any further contracts less than 20 yrs	Same as points of organizational control
	UO	1. end of 1st contract at 8 yrs 2. end of 2nd contract at 10 to 16 yrs 3. end of 3rd contract at 12 to 20 yrs 4. end of any further contracts less than 20 yrs	Same as points of organizational control
	FW	1. end of 1st contract at 12 yrs 2. end of 2nd contract at 14 to 20 yrs 3. end of any further contracts less than 20 yrs 4. 20 yr point for SaZ 5. mandatory retirement at age 53 for BS	Same as points of organizational control
	Officer	1. end of first contract at 12 yrs 2. 20 yr point for SaZ 3. mandatory retirement at age in rank	Same as points of organizational control
Netherlands	Mansch.	1. up or out at 35 yrs old 2. mandatory retirement by age	Basically unlimited after obligation is fulfilled
	OO	1. up or out at 35 yrs old 2. mandatory retirement by age	Basically unlimited after obligation is fulfilled and before up or out point; somewhat more difficult thereafter
	Officer	1. up or out at 35 yrs old 2. mandatory retirement by age	Basically unlimited after obligation is fulfilled and before up or out point; somewhat more difficult thereafter

The implications of hypotheses TC1 and TC2 are that both involuntary and voluntary separation should be easier in LME militaries than in CCME militaries. As Table 21 shows, again due to the odd behavior of the Dutch, the expectation on

voluntary separation is only weakly supported. Voluntary separation (following fulfillment of the obligation period) is very easy in both the UK and Ireland, somewhat more difficult for enlisted personnel in the USA (but not for officers), and comparatively difficult for German service-members of all tracks. The Dutch, however, have made voluntary separation quite a simple matter, and without further CCME countries for comparison, it is difficult to say whether this is abnormal or not. However, the fact that voluntary separation from the Dutch military is actually easier than voluntary separation in civilian society seems to indicate that the Dutch military's practice in this area is likely to be an outlier. This question would certainly benefit from further comparisons.

As for involuntary separation, the expectations are largely borne out with the exception of officers in Ireland who are very difficult to push out of the service through either ordinary or extraordinary means. This does not necessarily imply that they are more difficult to remove than personnel in the two CCMEs, just that their situation does not fit the expectation of the theory. Involuntary separation is easiest in the US Army, and most difficult in Germany and the Netherlands.

Table 21: Summary of Ease of Voluntary and Involuntary Separations

		Ease of Voluntary Separation	Ease of Ordinary Involuntary Separation	Ease of Extraordinary Involuntary Separation
UK	Enlisted	High (after obligation)	Medium	Medium
	Officer	High (after obligation)	Medium	Medium
Ireland	Enlisted	High (after obligation)	Medium	Medium-low
	Officer	High (after obligation)	Low	Low
USA	Enlisted	Medium	High	Medium-High
	Officer	Medium-High (after obligation)	High	Medium
Germany	<i>Mannschaften</i>	Low	Medium	Medium-Low
	<i>Unteroffizier</i>	Low	Medium	Medium-Low
	<i>Feldwebel</i>	Low	Medium	Low
	Officer	Low-Medium	Low	Low
Netherlands	<i>Manschappen</i>	High (after obligation)	Low	Medium-Low
	<i>Onderofficieren</i>	Medium-High (after obligation)	Low	Low
	Officer	Medium-High (after obligation)	Low	Low

Hypothesis TC3 simply argued that, due to the requirements imposed by the military's need for both long training and some turnover, militaries would need to be able to offer short-, mid-, and long-term fixed-term contracts even when such contracts are not legal in the private sector. It is in fact the case that, in the CCME countries, where there are legal limits on fixed-term contracts, the military is exempt from these rules and offers longer fixed-term contracts. In Germany, the civilian limit is two years, but the *Bundeswehr* can offer limited contracts of up to 20 years' duration. In the Netherlands, the civilian limit is three years, but the military offers limited contracts of up to 17 years

(i.e. to age 35 from age 18). The LME countries did not feature legal limits on the use of fixed-term contracts in the private sector, so it is not surprising that their militaries feature fixed-term contracts. These can in fact be significant in length – 22 years in the British Army for enlisted personnel, and up to 21 years for enlisted personnel in the Irish Army. The American military's practice of offering indefinite contracts to enlisted personnel who have served a certain amount of time is in some ways more similar to the German and Dutch career contracts than to the Irish and British practices of keeping a tight rein on enlisted personnel as they get older.

Hypotheses TC4 and TC5 dealt with the ease of voluntary and involuntary separation, relative between the military and the private sector. Hypothesis TC4 predicted that voluntary separation would be more difficult in LME militaries than it is in the LME private sector, and this was borne out by the evidence. In all three LME militaries, the existence of minimum obligation periods represents a restriction on quitting that is usually not present in the private sector. In the UK, the notice period for quitting military service is notably longer than in the private sector, and in Ireland, the requirement of payment is not normal in the private sector.

The hypothesis predicted that voluntary separation would be equally or slightly more difficult in CCME militaries than in firms. Voluntary separation from the military in Germany is probably slightly more difficult than it is in the private sector, but only because the period of obligation is longer in the military than on the civilian side. The

fact that voluntary separation from the Dutch military appears to be slightly *easier* than quitting a job in the civilian sector is very problematic for my theory.

Hypothesis TC5 predicted that involuntary separation would be more difficult in LME militaries than in LME private sectors, and approximately equally difficult in CCME militaries and private sectors. Involuntary separation is certainly more difficult in the military than in civilian society in all three LME countries. In both Britain and Ireland, involuntary separation is a long, complicated procedure prioritizing rehabilitation and/or re-assignment over firing, and in Ireland there is practically an unwritten policy of not firing officers. In the USA, the process of administrative separation is also usually long and costly, although somewhat less onerous than in the UK and Ireland and capable of being sped up when security circumstances call for it. Rehabilitation receives heavy emphasis in the US Army; re-assignment is possible but less common. In the CCME countries, involuntary separation seems about equally difficult in the military and the civilian sectors. This supports the hypothesis.

5.4 Conclusions

Thus, overall, the hypotheses derived from my theory find more support than the alternatives, although the Dutch case presents a puzzle and the comparison would clearly benefit from the addition of further CCME countries. The overall picture is one of military functional similarity heavily conditioned by national economic structure. What are the implications of these findings? In general, they support the argument made thus

far that national economic system conditions military personnel practices, and they show that job security is indeed a very important and difficult issue for militaries. Most interesting, though, are the implications for career incentives which these slightly different LME and CCME dynamics offer.

In LMEs, where the external labor market is robust, skills tend to be more transferable, and the general human capital an individual builds up from military service is worth more, it is the highest quality personnel who will have the most material incentive to leave the armed forces. The difference between what they can earn in the private sector and what they earn in the military is likely to be very significant. Lower-quality people, whose chances of getting another job are not as high, will have an incentive to stay with the military for the job security it offers. This is not to say that all those who wish to stay in the military are lower-quality, merely that the *material* incentives push in that direction.⁴³ This indicates that LME militaries must pay particular attention to the quality of the promotion system, so that good people believe they will have the best chances at promotion. Liberal Market Economy militaries also ought to provide targeted incentive packages to retain the most capable people.

In CCMEs, on the other hand, despite the fact that individuals receive civilian-recognized training, the anemia of the external labor market often means that even highly skilled people may care more for job security than for income. Even if income

⁴³ The fact that there are many non-material incentives for military service has been discussed above.

were the overriding factor, the compression of pay scales in CCMEs means that pay in the private sector is unlikely to outstrip military pay by significant margins. Thus the incentives look good for keeping high-quality people. However, CCME militaries are likely to have the dual problem of difficulty recruiting high-quality personnel in the first place, and difficulty separating those who do not perform well. This indicates that these militaries are more likely to face situations where redundancy separations are necessary. In general, they may suffer from greater personnel inefficiencies than the LME militaries, but it would take a detailed economic study to determine whether such inefficiency is in fact more expensive than the bonuses and incentives necessary in the LME situation.

Furthermore, militaries in CCMEs are still somewhat more likely than those in LMEs to feature some kind of elected employee representation.⁴⁴ Thus there will be personnel pressure in these militaries in two ways: first, it will be somewhat costly and difficult to get people to leave the organization at all. Re-training programs and less-flexible personnel structures like the single up-or-out point generally mean a lot of expense (e.g. by retaining people who should no longer be in service). Second, there will be pressure from the employees to make work conditions as attractive as possible. Since many of them will spend a long time in military service, they will want the discomfort

⁴⁴ Note that this distinction is rapidly disappearing due to the influence of the European Union and transnational cooperation of military unions e.g. through Euromil.

minimized. This is likely to lead to such things as limitations on working hours, paid overtime, and short rotations through hardship tours. Once again, these issues may limit CCME operational capabilities. Although it ought to be possible to incentivize leaving in CCME contexts by offering e.g. attractive severance packages, there are two problems with this approach. First, this kind of incentive is less efficient than bonuses to get good people to stay, because it is paying less desirable people to leave rather than paying desirable people to stay and contribute to overall efficiency and effectiveness. Second, we saw in earlier chapters that CCMEs tend to have more trouble than LMEs offering targeted incentives of any kind. They certainly can and do offer severance packages; whether they can influence who takes them or not is another matter.

Beyond all of these issues is the question of whether the future force will need the same personnel structure at all. Many commentators have called for re-organization to make armies look more like huge collections of special operations forces (e.g. former US Secretary of Defense Rumsfeld, see also Coté 2004). Some of the characteristics of special forces are extremely long training periods (and thus necessarily long obligation periods), an older average age and longer length of service, and a rank profile that looks more like a fat column with a small pyramid on top than an obtuse pyramid. If major force re-structuring is in the cards for any of the countries in this study, the defense communities would do well to take the constraints outlined in this chapter into account.

6. Conclusions

The broad claim underlying this study is that military organizations, like firms, conform to the economic logic portrayed in the literatures on Human Capital and Varieties of Capitalism. This claim has two major implications: first, that appropriate human resources management strategies can be derived from the military's functional mission by looking at the amount and type of training needed for its personnel, and second, that the feasible human resources management strategies can be derived from the military's economic context.

In this study, I have argued specifically that, while militaries may indeed look very similar to one another, where they do diverge they ought to diverge according to the logic of complementarity with their respective economic systems. I have attempted to explain why militaries will look alike on certain dimensions, as well as predict where they may differ and how those differences ought to manifest themselves. This was a first cut at an extremely complex problem, and a number of questions remain unanswered, but it is safe to say that market economic context is a significant determining factor for military personnel policy. This chapter summarizes the results of the empirical study, discusses the theoretical and practical implications of those results, and indicates where this study could be improved upon by further research.

6.1 How the Hypotheses Performed

Although the evidence for some hypotheses was inconclusive, and in a few cases clearly contradicted my expectations, the overall picture is positive. Most of my hypotheses were at least partly supported by the evidence. Furthermore, none of the alternative hypotheses provided a superior explanation. Tables 22 and 23 below summarize the performance of the alternative and main hypotheses.

6.1.1 Alternative Hypotheses

6.1.1.1 Similarity due to Functional Imperative

Conceptually, there are four main alternatives to my argument. One was the argument that all militaries ought to look alike due to their functional similarity. As I have tried to make clear, I do not argue that militaries ought not to look alike at all; in fact, I attempt to explain in detail exactly why they ought to look alike on some dimensions. However, it would have been a contradiction to my theory to find little or no variation across militaries on any of the personnel areas examined. There are unmistakable economic pressures on military organizations, and if the organizations had in all cases resisted those pressures due to an overriding national security logic, my argument would have been defeated. This was clearly not the case: there was far too much interesting and distinct variation for this alternative to have provided a superior

explanation. It thus became my task to determine whether the variation fell in the directions my theory predicted.

6.1.1.2 National Idiosyncrasy

A second alternative argument was that the militaries' practices would follow no pattern at all, but would instead be the result of idiosyncratic and path-dependent bureaucratic and political development in each country. Of course, if one goes into enough detail, all militaries will look different from one another. As a meaningful alternative to my position, however, this argument would have predicted essentially that there was more diversity among military organizations than among firms or economic types. This is a plausible expectation in the sense that the experience of military disaster (whether in victory or defeat) is often a catalyst for change and that every country's "lessons learned" are likely to be different. This alternative, however, found little support in the evidence. Although there were some instances of serious idiosyncrasy – e.g. the Irish practice of not differentiating service personnel by occupational function until later in their service – there were also clear patterns of similarity, and there was in most cases more similarity (across economic types) between militaries than between firms.

6.1.1.3 Socio-Economic Legacy

Yet a third alternative argument was that the historical class bases of enlisted personnel and officers would be a more important factor in military personnel policy than economic context. This alternative, like the first one above, predicted similarity among countries, but with a clear divide between the way enlisted and officers were handled in all cases. This alternative is compelling precisely because we are dealing with personnel policy, where the legacy of socio-economic class might be expected to be powerful and deeply ingrained. Had the evidence shown no difference in practice across LMEs and CCMEs in the treatment of officers or of enlisted, respectively, that would have contradicted my theory.

Indeed I do find significant differences between policies on officers and enlisted personnel, but primarily in the Liberal Market Economies. The only way in which officers and enlisted are differentiated all the way across economic groupings is in the different levels of rigor applied to their selection, including levels of required education. The Continental Coordinated Market Economies feature less social mobility in both their educational and their military systems, and tie entrance to military tracks to educational achievement, but then treat most personnel the same on the dimensions of occupational specialty assignment and contracts. The Liberal Market Economies also tie entrance to educational attainment, but offer somewhat more mobility between tracks, while treating the two groups as significantly different populations. I believe this argument

has some merit, but most likely *within* the context of economic infrastructure rather than independently of it.

6.1.1.4 Mission Posture

A fourth alternative was that mission posture determined personnel policies. The idea behind this argument is that “military function” is too weakly specified, and that in fact all militaries do *not* have the same functions. Therefore, they will not have the same personnel requirements. I operationalized this as a distinction between those militaries with an expeditionary mission posture and those without. “Expeditionary” refers specifically to high- as well as low-intensity operations capability; militaries which deploy personnel but which conduct exclusively low-intensity classic peacekeeping missions are not classified as expeditionary. This argument is plausible in the sense that expeditionary forces certainly face a great deal more personnel pressure, both in terms of organizational need for warm bodies and in terms of the stresses imposed on service-members which might affect individual decisions to enlist or re-enlist. This alternative would therefore have predicted that the USA and UK would generally fall in the same basket, while the other three ought to fall into a distinctly different basket together. This hypothesis found little support. As my theory also predicted, the USA and the UK often fell into the same group, but generally only insofar as they also fell into a group with Ireland, and in practically no sense did Ireland ever seem to be more similar to Germany

and the Netherlands than to the USA and UK.¹ Furthermore, there were some areas in which Germany and the USA looked more similar to one another than did the USA and the UK.

The only other alternative explanation was a specific argument about occupational specialty assignments, and it was that they would fluctuate with the market because they are essentially a bargaining chip. This was supported only in the case of enlisted personnel in the United States, and again the fact that the exception appeared in a flexible LME context is far less of a surprise than it would have been had it appeared in a CCME.

¹ With the possible exception of the difficulty involved in the involuntary separation of officers in Ireland.

Table 22: Alternative Hypotheses

Supported	Inconclusive	Not Supported
		SA6 and TC7 – Selection and accessions processes, terms of contract, and separations will group by mission posture: US and UK; Ireland, the Netherlands, and Germany.
		SA7 – no patterns (national idiosyncrasy).
	OS4 – enlisted personnel will be guaranteed occupational specialties before obligating themselves to service, and will have more choice in the matter. Officers will not be guaranteed specialties, and their specialty assignment will be largely up to the organization. [supported in two of three LMEs but nowhere else]	
	OS5 – specialty assignment practices will vary with the ease or difficulty of recruiting – the more difficult recruiting becomes, the more concessions the organization will make to the potential recruit. [supported in one LME but nowhere else]	
		TC6 – Terms of contract and ease of separation will be very similar across all countries. [there are some similarities, but not enough to be convincing as a true alternative]
	TC7: In expeditionary militaries, voluntary separation will be difficult while involuntary separation will be comparatively easy; in non-expeditionary militaries, voluntary separation will be somewhat easier and involuntary separation somewhat more difficult than in the expeditionary ones.	

6.1.2 Main Hypotheses

6.1.2.1 Selection and Accessions

The hypotheses on Selection and Accessions concentrated primarily on the relationship between the military and the national educational system. The first hypothesis predicted that CCME militaries would consider educational certification an indispensable and inflexible selection criterion, much the same way that such certification is regarded on the civilian labor market. This was differentiated from the expected situation in LMEs, where educational certification is important but generally fungible with significant relevant work experience. I thus expected militaries in LMEs to have somewhat more discretion regarding whether to select an individual who did not meet the educational criteria.

This expectation was borne out. Its significance is two-fold: first, it means that LME militaries are potentially better able to adapt to social or demographic changes that impinge on the ease of recruiting. This is a double-edged sword, however, in that it also means that LME militaries may be more susceptible to the trap of accepting too many low-quality applicants when recruiting is difficult. The flexibility which is good when it allows the organization to catch good individuals who have somehow fallen through the cracks of a normal educational progression, can also be abused. The other implication of this finding is simply that the logic of my theory appears to hold on first testing: where

there is no clear functional reason for militaries to be the same, they should diverge toward their respective economic practices.

The second hypothesis builds upon the first, assuming that the rigor of the selection processes would need to be approximately equal, and thus that the lower reliance on educational certification in LMEs ought to lead to a greater reliance on other forms of selection, specifically aptitude testing. Aptitude testing is a relatively low-cost way to get a standardized measure of certain desirable attributes from large numbers of recruits. This expectation was not borne out. The reality is very complex, and deserves an independent study of its own.

The third hypothesis deals with the connections between the structure of the educational system and the structure of military career paths and entry points. I hypothesized that the number of tracks in the school system would roughly predict the number of career tracks in the military, and thus would also predict points of access to the military. While the prediction regarding the number of career tracks in the military found good substantiation, the prediction regarding the number of points of entry proved to have been too simplistic. The hypothesis was not actually contradicted: in no case was there a school track which did NOT correspond to a military career track and a point of entry. However, the CCME militaries in particular presented a number of extra points of access. These were defined by educational achievements in combination with vocational training, which I had not taken into account. The United States also featured a

few extra points of access, but they were all to the lowest enlisted ranks (privates rather than NCOs) and based primarily off of militarily relevant experience such as ROTC, meritorious performance in training, or prior service. All of this is consistent with the logic of the theory despite being inconsistent with some of my specific expectations.

These results are important for debates over lateral entry options. In those militaries where extensive lateral entry options exist, those options are nearly always tied to standardized educational *and skills* qualifications. This does not mean that such entry options *must* be based on education and skills certifications – it stands to reason that LME militaries would look at work experience as well as or in lieu of skills training – but it does highlight the fact that lateral entry is generally considered an interesting and useful option only for those positions which require specific technical skills. The experience of the Germans and the Dutch is that persons who have such skills are not interested in joining the military, even with the incentive advantages offered through lateral entry. This is almost definitely due in part to the problems of re-entry into the labor system, mentioned in earlier chapters, which characterize CCME labor markets, and that problem would be mitigated in an LME context. However, it is probably also partly a result of the mis-match between compensation rates in the military and those for skilled workers in the civilian world, and this problem would almost certainly be worse in an LME than in a CCME (due to the larger distribution of incomes in LME labor markets).

There is no question that lateral entry options into the US, UK, or Irish militaries might give those organizations access to people who currently cannot find a way into service. There is also no question that such an option might enable these militaries to hire people who bring useful skills with them. There is, however, a question as to how much this would really cost, both in terms of adequate compensation (enlistment bonuses for certain skills are already very high in the American military) and in terms of extra training costs incurred by training significant numbers of people outside the established training pipeline. Hiring qualified people directly to a higher position, assuming such people are available, may be a solution to some of the military's retention problems, but the military must also be concerned with issues of perceived inequity and dissatisfaction among other personnel. It might make more sense to create an extra career track for technical specialists (resembling that of *Fachunteroffizieren* in Germany), one where the pay could be determined by time in service and by skills rather than by rank. The USA has already created the rank of Specialist, but a further track would give the organization more flexibility to retain people for longer.

The fourth hypothesis deals with socio-economic mobility, or what I termed "permeability". This hypothesis is closely related to the third hypothesis on career tracks and points of entry and was aimed at determining to what extent the existing socio-economic order is mirrored in the military. Part of the reason for investigating this issue is the emphasis which many American commentators put on the military as a tool of

integration and upward social mobility; I thought it would be interesting to see whether this sort of expectation holds true in more economically stratified societies.² The third hypothesis provided evidence that the “classes” established by the school and training system are perpetuated in the military. The fourth hypothesis asked whether it was any easier for people in the military to transcend the boundaries between those classes than it would be for them in civilian society. The expectation according to the theoretical framework was “no”, and this was largely borne out. The three LMEs, with the most socio-economic mobility, also had greater institutionalized mechanisms for people to use military service to advance beyond the position which their preparation in civilian society would have allowed them (including both movement to NCO status and to commissioned officer status). The Netherlands, with a system that is slightly less upwardly mobile than in e.g. the USA, but more mobile than Germany, provided some such mechanisms (primarily for moving to the NCO level), and Germany provided the fewest. This does not mean that enlisted personnel in Germany and the Netherlands cannot become officers; indeed, many do. It simply means that they generally cannot bypass the educational requirements that non-prior-service-members must meet, and thus that their service has not provided them with a path around society’s usual constraints. Militaries largely reflect the possibility of upward mobility in society at

² I want to stress that by “economically stratified” I do not necessarily mean that the society has a more skewed income distribution curve than in non-stratified economies. Stratification in the sense I am using it here refers more to the idea of largely self-contained *socio-economic* classes which are difficult to break into or out of.

large: in societies where upward mobility is informally rather than institutionally constrained, the military may provide a good opportunity because it does provide training and work experience. In societies where upward mobility is formally constrained, the military is not likely to provide a better opportunity than any other occupation.

This fact may have an effect on the kind of person who chooses military service. This study has not examined this issue, but it seems reasonable to think that the military might attract more ambitious people – and in particular more ambitious and talented people from disadvantaged groups – in a setting where it presents an opportunity for upward mobility. There is also a possibility that retention may be affected by the potential for upward mobility, although just how these effects would manifest is a matter for further consideration. It is likely that strong upward mobility potential reduces retention, while weak upward mobility potential may increase it (as the person invests more and more time in advancing within the institution, it becomes less and less profitable to go outside it). This is again consistent with the predictions mentioned in Chapter 2 about the retention dynamics of LME and CCME militaries, respectively.

The fifth hypothesis on selection and accessions simply stated that LME militaries ought to be more likely than CCME militaries to feature flexible monies for enlistment bonuses. This expectation derives largely from my belief that LME militaries will rely more on flexible incentives than on regulation, and bonuses are a flexible

incentive (unlike pay rates, which are far less flexible). The expectation was borne out in the sense that both the militaries offering bonuses were LMEs (USA and UK), and that the two CCME militaries did not offer bonuses, but neither did Ireland, an LME. These results might also be argued to support the mission posture alternative explanation. It is also possible that Germany and the Netherlands simply have not yet reached the point in their recruiting experience where bonuses seem like a necessary tool, but at least the logic of my theory continues uncontradicted. It will be particularly interesting to watch developments in the Dutch and German militaries as the demographic trough hits their recruiting, and see whether they turn to flexible, targeted bonuses, or choose some other way to deal with the problem.

6.1.2.2 Occupational Specialty Assignment and Training

The second set of hypotheses dealt with the assignment of occupational specialties within the military. These were predicated on the vocational training systems and the significance of vocational skills certification on the national labor market in each country. The first hypothesis predicted that CCME militaries would give their recruits – both officer and enlisted – a high level of input and an essentially free choice in their occupational specialty assignment, while LME militaries would feature less choice and influence. The evidence was inconclusive, but not in a way that contradicts the hypothesis. All recruits in both CCME militaries enjoyed essentially full influence over their occupational assignments, within the bounds of their objective qualifications. The

LMEs presented a more diverse picture: officers in LME militaries had little or no choice in their branch assignment, but some enlisted personnel did. British enlisted recruits determined their functional specialties in conversation with their recruiters and based on their aptitudes for various jobs, in a process essentially indistinguishable from that of the CCMEs. American enlisted recruits currently have almost the same experience, but this is essentially a function of the tight recruiting market: the promise of a functional specialty of the individual's choice is an added incentive to join. There is no reason to believe that this will be permanent U.S. Army policy, and the U.S. Marine Corps does not function the same way. Irish enlisted personnel have very little choice and are in that way in the same situation as officer candidates in Ireland, but it is possible that this is attributable to the small size and lower level of functional specialization of the Irish military rather than to the economic context.

It is therefore difficult to say which of the LME militaries is the "rule" and which are the "exceptions", but a few comments are in order. First, it is questionable whether the Irish military model would even be possible in a CCME context: a volunteer military where there was little or no initial occupational training or specialization, and where the individual had no choice over his or her eventual specialization, would very likely find no volunteers in a CCME country. Second, the fact that the United States Army's practice is market-sensitive is consistent with the theory presented here in that the hypothesis expected more flexibility from LMEs. The case of the British enlisted

personnel looks like good evidence for the alternative explanation of class difference, and indeed that probably is the root of the differing practices, but it appears only because the flexibility of the LME context allows it to.

Clearly the main function of this hypothesis is to support the theory's contention that economic context matters for personnel policy, but there are also potential implications for the policy's effects on the institution. On the one hand, the organization can be expected to prefer a system where it has more control than the employee over assignment. However, precisely because the organization's interests are at odds with the individual's interests, when recruiting becomes difficult, the organization must make concessions. Thus a practice which would be acceptable to the organization only when there was a surplus of qualified labor available, is actually most likely to be implemented precisely when there is a lack of qualified labor. Allowing individuals to choose their own functions is an incentive to serve. That ought to be the case regardless of economic context. It seems fair to maintain, however, that individuals in CCMEs will be *less* willing to take a third or fourth choice function than individuals in LMEs would be, since the former will often be locked into that occupation for a significant amount of time while the latter will have very little difficulty switching out of it if they should choose to do so. In a CCME context, no rational employee ought to sign up for military service unless he is able to choose his own function. Therefore, while the practice of negotiation is absolutely indispensable in CCME contexts, it is also more of a "luxury"

than the same practice would be in an LME context, in terms of the numbers of recruits needed to meet goals. It is probable that larger proportions of the recruit cohort drop out in CCMEs due to a lack of availability of their preferred functional specialties than is the case in LMEs. A further problem for CCMEs is the fact that “qualification” for a particular functional specialty is also quite strictly specified, which means that young people who have been dissatisfied with their schooling may have less of an opportunity to explore new career avenues through the military. They may not be qualified to do certain functions which they would be interested in pursuing, and this might possibly be a disincentive for such young people to enlist.

Thus there would appear to be no choice in the matter for CCMEs, which must negotiate functional assignments. Liberal Market Economies have a little bit more leeway and it is important to consider the costs and benefits. It is possible that the practice of guaranteeing the individual his functional specialty of choice contributes to job satisfaction and therefore to productivity and overall effectiveness. This is worth considering and testing.

The next two hypotheses in this group concern the level of effort the military will put into coordinating its training schemes with the civilian equivalents. The expectation was that the greater significance of skills certification in combination with the greater standardization of certification in the civilian world would cause CCME militaries to put high effort into coordinating their training with the civilian institutions. The lower

significance combined with generally lower standardization in LMEs would make such coordination both more difficult and less important, and thus somewhat less of a priority for militaries. These hypotheses are supported by the evidence. The primary significance of these hypotheses is for recruiting and retention: CCME militaries seem to be much more dependent on their ability to offer occupational training than are LME militaries. This in turn is a budgetary issue, since it is costly to provide training in terms of both training personnel, time lost to the military's primary tasks, and wasted human resources when trained personnel leave the military. Another implication is that it would stand to reason that greater harmonization of standards and training experiences between civilians and the military might make some outsourcing and civil-military cooperation easier. If the military technical specialists and the adjunct civilian specialists understand one another and respect one another's qualifications, communication and coordination ought to be easier.

The final hypothesis in this section addresses the issue of skills training as it relates to military necessity. In the pure economics of the organization, people ought to be trained for those tasks they will be expected to do, and not for any other tasks. In the case of the military, this would mean that some people get occupational skills training, while others get training in the operation of tanks or in infantry tactics. Even the most military-oriented training is likely to endow the individual with general skills, but obviously not with occupational/transferable skills. In an LME context, this ought not to

be a significant problem. Employers outside the military are interested in people with the general skills which military experience of any kind gives them, and training for the job generally happens on the job. Thus in an LME military, we expected extra training – not related to the individual’s military function – to be truly “extra”. It ought to be available as a further incentive, but not guaranteed. In a CCME, on the other hand, those people who were stuck with a purely military function would be in a very bad spot if they tried to re-enter the civilian labor market with no occupational skills after four years in the military. Such people would, in effect have no choice but to stay in the military, and they might not in all cases be the people the military most wants to retain. In order to recruit and retain sufficient personnel, therefore, militaries in CCMEs ought to provide civilian-recognized occupational skills training for everyone. The evidence largely supports these expectations.

The requirement for CCME militaries to provide occupational training for anyone who wants it is obviously an extra cost: not only must the military finance and provide the logistics for the training programs, but they must also ensure that service-members have a realistic possibility of completing courses of instruction, which implies a cost in time as well. In addition, military personnel who have no opportunity to practice their occupational skills will be at a serious disadvantage on the labor market even with their certifications in hand, so the military will be under pressure (especially from service-members’ unions) to provide opportunities to practice. This points to a

possible advantage for CCMEs, which is that their forces are likely to feature a large number of people – including relatively junior people – with training in various civilian occupational skills, and this may in fact give them an edge in peacekeeping and post-conflict reconstruction missions. It also points to a potential restraint on such militaries, which will prefer not to deploy at all, or to deploy on missions where they can employ their skills rather than on combat-heavy missions.

6.1.2.3 Terms of Contract and Separations

The final set of hypotheses deals with the individual's relationship to the organization particularly in terms of the security and predictability of the employment. Chapter 2 explained how the nature of the military's training required that both the employer and the employee have significant guarantees about the other's behavior; these hypotheses seek to test those expectations. The first two hypotheses predicted that both voluntary separation and ordinary involuntary separation ought to be easier in LME militaries than in CCME militaries. The first hypothesis in this section deals with ordinary involuntary separation, and is essentially supported in all cases except that of officers in Ireland (where the only organizational control point is the mandatory retirement age). For both officers and enlisted, the LMEs have more control points than the CCMEs, meaning that ordinary involuntary separation is easier in LMEs than in CCMEs.

The hypothesis on extraordinary involuntary separation was difficult to test with only interview data, but that evidence indicates that such separation is easiest in the USA, somewhat more difficult in Ireland (enlisted only) and the UK, and difficult to unheard of in the Netherlands and Germany, as well as for Irish officers. This accords with the expectation of the theory, except for the Irish officers; that exception may indicate some support for the mission posture hypothesis.

The hypothesis on voluntary separation predicted that such separation should be easier in LMEs than in CCMEs, and ease of separation was operationalized as the amount of structure restricting when the individual could choose to leave. The evidence adduced for the hypothesis on voluntary separation is difficult to interpret. The LMEs generally did not structure their personnel's opportunities to exit (i.e. exit was easier), with the exception of American enlisted personnel (and, to a lesser extent, officers), and Germany featured very restrictive voluntary separation structures. The Dutch military, however, featured far less structure than the Germans and even the Americans; their situation was similar to the British and the Irish. This does not fit the expected pattern, and when combined with the evidence on hypothesis TC4 on the relative ease of voluntary separation in the military and civilian society, it becomes a serious problem for my theory. Voluntary separation from the Dutch military appears to be even easier than voluntary exit from a firm in the civilian economy. In my sample, the Dutch are highly anomalous, and therefore it is important that further testing be carried out on

other CCME countries to determine whether the Dutch are in fact anomalous or the larger group of CCMEs simply does not conform to the expected pattern.

The hypothesis TC3 simply predicted that the military need for mid- and long-term but not indefinitely-contracted workers would lead to a situation where normal CCME rules on fixed-term contracts would be suspended for the military. It is in fact the case that both CCMEs allow their militaries to conclude non-indefinite contracts for much longer periods of time than civilian firms are allowed to do.

Hypothesis TC4 on the relative ease of voluntary separation in the military versus civilian firms predicted that voluntary separation would be much more difficult in LME militaries than in LME firms, and equally or slightly more difficult in CCME militaries than in CCME firms. The evidence matched expectations in all cases except that of the Dutch, where voluntary separation from the military appears to be *easier* than it is in the civilian economy. This is counter to my theory and requires further testing.

The next hypothesis, on the relative ease of involuntary separation in the military versus civilian firms, found much more support. The expectation was that involuntary separation ought to be more difficult in LME militaries than in LME firms, and approximately equally difficult in CCME militaries and firms. The evidence supported these expectations in all cases. The implications of these findings have mostly to do with the relative attractiveness of the military as an employer. Militaries in LMEs are attractive employers for the relative job security they offer (involuntary separation

relatively more difficult than in civilian society), while they do not provide noticeably more job security than a civilian job in a CCME and in many cases offer less (due to limited-term contracts). In terms of voluntary separation, on the other hand, militaries are somewhat *less* attractive in LMEs due to the relative difficulty of exiting the job. Militaries in CCMEs ought to have been essentially no different from firms on this point, but the Dutch military probably holds some attraction for young people who are uncertain about what they want to do with their lives, since it offers high job security but also very easy exit.

The relative ease of voluntary and involuntary separation between LME and CCME militaries, on the other hand, points to implications for the relative efficiency of their human resources systems. The less structure the organization imposes on an individual's opportunities to leave the service voluntarily, the more it must rely on incentives to shape service-members' exit patterns or suffer inefficiency. Incentives are more difficult to fashion precisely and somewhat less reliable than regulations, but on the other hand, they are more flexible and less daunting to potential recruits. A military which relies on incentives, however, will inevitably see its costs go up when personnel tempo begins to make service less attractive. If voluntary exit is easy and conditions change to increase the costs of service to the individual, that military organization will have to resort to very high-cost incentives or to very unpopular emergency regulations (such as stop-loss) in order to keep people in. I must leave it to economists to calculate

whether it is better for a given country to expend the marginally higher constant cost of regulations or to expend the much higher but occasional costs of matching incentives to supply and demand.

As for involuntary separation, it seems like the most flexible arrangement for the organization would be one where the opportunities for ordinary involuntary separation were relatively limited and extraordinary involuntary separation were easy and normal. This, however, would introduce so much uncertainty for the employee that it is easy to see why there isn't a single military in my set that functions that way. Instead, the militaries either feature a number of what I have called "control points", where service-members are routinely reviewed for retention or separation, or they feature very little involuntary separation at all.

If low levels of involuntary separation are compensated for by high reliance on incentivized voluntary exit, then the efficiency of the organization will depend almost entirely on the efficiency of the incentive system and could conceivably be very high. If, on the other hand, the low levels of involuntary separation match similarly low levels of voluntary separation, the organization is likely to have serious problems with manpower inefficiency. It is precisely the implication of the theory presented here that CCME militaries ought to suffer from this combination of low tolerance for involuntary separation plus low incentive for voluntary separation. Indeed, when the incentives for voluntary separation are low, even structured opportunities for exit will have low

effectiveness. In such a situation, as mentioned in previous chapters, it becomes difficult to manage the age profile of the force, and even more difficult to manage the age-in-rank profile. It becomes difficult to promote the best people if those above them cannot somehow be forced up or out to make room. This in turn becomes a problem for organizational effectiveness and more particularly for flexibility and innovation within the organization. It also has the clear potential to be a major problem for morale.

Table 23: Main Hypotheses

Supported/Partly Supported	Inconclusive	Not Supported
SA1 – education will be a less flexible criterion for selection in CCME militaries than in LME militaries.		
		SA2 – aptitude testing will substitute for educational certification in LME militaries. [use of attitude and aptitude testing varied widely]
SA3 – the number of career tracks in the military should correspond roughly with the number of tracks in the school system.	SA3 – the number of access points should also correspond to the number of tracks in the school system. [too simple – need to take vocational training into account]	
SA4 – permeability (i.e. socio-economic mobility) between tracks ought to be related to permeability in educational system.		
	SA5 – LMEs will be more likely than CCMEs to have flexible monies available for enlistment and re-enlistment bonuses. [USA clear outlier]	

	OS1 – CCME militaries will feature contracting processes which give the recruit high choice and certainty over specialty assignment; LMEs will not. [CCMEs fit pattern, LMEs diverse, but this may not be a contradiction]	
OS2 – CCME militaries will exhibit a high level of effort to coordinate their training and education with civilian schemes. OS2a – LME militaries will exhibit low to moderate effort to coordinate (varying with the level of standardization).		
OS3 – CCME militaries will offer occupational skills training to all military personnel with at least a medium-term contract; LME militaries will provide occupational skills training only to those personnel expected to carry out such occupations within the military.		
TC1 – contracts in LME militaries ought to feature a larger number of points where the organization has a structured opportunity to end the employment relationship against the individual’s will (involuntary separation), than contracts in CCME militaries. [exception for Irish officers]		
TC1a: Extraordinary involuntary separation ought to be easier in LME militaries than in CCME militaries		

	TC2 – Contracts in CCME militaries ought to be more likely than those in LME militaries to structure the individual’s opportunities to leave the service voluntarily; LME contracts should feature more freedom for the individual to choose when he or she will leave. [Dutch practice anomalous]	
TC3 – In CCMEs, militaries ought to be able to offer fixed-term contracts for longer periods than private-sector employers can.		
		TC4 – voluntary separation ought to be more difficult in LME militaries than in LME firms. It ought to be equally or slightly more difficult in CCME militaries as/than in CCME firms. [Dutch practice is counter]
TC5 – Involuntary separation ought to be more difficult in LME militaries than in LME firms. It ought to be equally difficult in CCME militaries and firms.		

Overall, the findings on the hypotheses were largely in accord with my theory, with the significant exceptions of the ease of voluntary separation from the Dutch military, the difficulty of involuntary separation for Irish officers, and the puzzling findings on aptitude testing. Several of the hypotheses are in need of refinement and re-testing, and only further comparison can settle the question of whether the evidence

which was contradictory to my theory represents a true contradiction or an idiosyncrasy.

6.2 Theoretical Implications

Aside from the practical issues raised above both as implications and as avenues for future research, this study represents an important theoretical contribution to the literatures on Varieties of Capitalism and military personnel issues. While the literature on human capital has specifically referenced the military, especially with respect to issues of training and compensation, the comparative political economy literature largely ignores it. The concept of Varieties of Capitalism was developed as a firm-centric approach, and has concentrated on the behavior of private sector firms. Its logic has not been applied to the military as an economic actor. More puzzling is the fact that the literature talks at length about the importance of close relationships among companies for technology transfer and standard setting, but never mentions the military in this context, even though it is a source, a driver, and a consumer of technological innovation.

Despite many commentators' remarks about militaries acting a great deal like firms, as yet no one has analyzed military human resources behavior through the lenses of firm behavior developed in the field of Political Economy. This is partly due to the absence of a profit motive in the military and partly to the public sector nature of the organization. It also owes something to the general difficulty of subjecting militaries to analyses of "economy", since measuring their effectiveness is so difficult and they have

a great deal of redundancy built in. This study applies the analytical frameworks of Human Capital theory and of Varieties of Capitalism to the military, and finds that these frameworks can be adapted to yield fresh insight into military personnel policy and human resources management. Furthermore, this study provides another test of the larger-system claims which the Varieties of Capitalism school makes, namely that national economies are systems of complementarities and that foreign elements create off-equilibrium behavior. Although I was unable to provide a strong test of the adverse results of non-complementary behavior (see Appendix A on recruiting and retention), my study does provide a good first cut at whether the claims of complementarity are strong. I find that, in most cases, any divergence in military behavior corresponds closely to the nature of the behavior expected in the civilian economy. This is further support for the Varieties of Capitalism argument, although it will be more convincing when more testing is done.

The main theoretical contribution of this study is the way that it clearly identifies specific economic factors which are tied to military necessity (e.g. training), which can then be used to predict and analyze other personnel issues (e.g. contracts). When this is combined with an understanding of the surrounding civilian economy and when the logic of complementarity is applied, it provides not only a useful tool for categorization and analysis, but also a way to identify key issues and potential problem areas for military operations and reform.

6.3 What Next?

The evidence did not perfectly support the theory put forth in this study, but there was enough support to make further research and testing on the topic worthwhile. The empirical studies also pointed out a number of unanswered questions which would benefit from more investigation. Many avenues for further research have been suggested, and they are summarized here.

Most obvious are the further direct tests of the theory presented here. More countries could be added in both categories, and further categories – such as the Scandinavian or Asian CMEs – could be added and tested. It would be very useful to create and specify more categories of the independent variable, including perhaps the Mediterranean group, post-Communist countries, and so forth. It will also be key to test the theory's implications for recruiting and retention, if such data can be collected in sufficient quantities. I also mentioned the possibility of testing the Varieties of Capitalism idea by looking at the impact of different training policies on post-military employment patterns, both in terms of unemployment rates and in terms of the kinds of jobs where former military personnel can get jobs in Liberal versus Coordinated Market Economies. This is somewhat related to the issue of upward social mobility and permeability and the two could be studied either separately or together.

More thorough testing of some of my hypotheses could include looking at the ease of extraordinary involuntary separation through statistics on administrative and

disciplinary separations, if such data could be compiled. Another possibility would be taking a closer look at the rigor and difficulty of selections processes by looking at statistics on failure and dropout rates. The uses of attitude and aptitude testing could also be investigated.

Other issues which I did not address here but which are closely related include the roles of employee representation and service-members' associations in militaries, especially as regards pay,³ training, career paths, and foreign policy. It would also be prudent to investigate the cross-national variation in rules governing political behavior by military personnel. The issue of outsourcing, and specifically to what extent skilled occupations are outsourced to civilians in different types of economies, is worth further investigation, as is the problem of labor competition between private military companies and militaries. Studies of the types of operations different militaries favor and whether there are comparative advantages in operations would also be welcome.

Another avenue of interest would be to study promotion systems and compare the incentive and pay structures they represent. The American up-or-out system seems to offer certain efficiencies over other systems, but it can also create problems. A good example of a problem with the up-or-out system is the dilemma faced by the new US

³ Owen R. Coté, Jr. (2004, 55), has argued with respect to the US military that "today's military compensation policies are too inflexible to develop, retain, and motivate enough officers and enlisted people with the skills needed to exploit [the inevitable] increased authority [devolved to them], without at the same time greatly overpaying people in more mundane occupations".

Marine Corps special operations forces. Their manpower structure consists primarily of senior enlisted personnel, a large number of Captains and Majors, a handful of Lieutenant Colonels or Colonels, and one General. The amount of training and resources invested in these personnel is both a reason for the organization to want to capitalize on them, and an indication of how committed these individuals are to the organization. The problem is that there are very few opportunities for them to stay in special operations and still get promoted. This means they must either rotate out of the special forces in order to advance their careers (this is the current plan for these personnel), or they must leave the Marine Corps, taking all their training with them.

It might also be instructive to look at the budget processes in different countries to see whether CCMEs, which tend to rely on more “patient capital”, have longer-term budgeting programs and LMEs tend to follow the United States’ pattern of revisiting the military budget every year.

Finally, it is possible that the evidence presented here might have implications for different militaries’ abilities to innovate both organizationally and doctrinally. The economic literature indicates that hierarchy and unilateral control, as usually exist in LME firms, facilitate rapid change within an organization (Soskice 1999, 117). Both Stephen Peter Rosen and Elizabeth Kier also indicate that centralized control of the organization facilitates rapid organizational adoption of innovations once the innovation has been made. The economic literature argues, however, that hierarchy and

centralization have this effect primarily when they are coupled with an ability to hire and fire at will, which practically no military has. Hiring and firing are not low cost for militaries, and they are usually constrained in their ability to post market-determined rewards. This indicates a possible brake on militaries' abilities to innovate technologically, because they cannot simply get rid of people with old skills and hire people with new skills. It does not necessarily indicate an inability to innovate doctrinally, though, since there is no external market source for people with new doctrinal "skills" and the centralization of the organization will still facilitate diffusion. It may indicate, however, that doctrinal innovation cannot be expected to happen as quickly as technological innovation happens in the private sector.

The question also remains of what the trends will be in the future. Although one strand of the VoC literature implies that convergence is neither required by the international market nor likely to occur, the case of the Netherlands seems to imply that attempts are being made to introduce some liberal elements to coordinated economies. More specifically, some have argued that the nature of technology is making the maintenance of educational systems such as those found in Coordinated Market Economies more and more difficult. Fons van Wieringen and Graham Attwell (1999a, 4) note that the type of education normally found in CCMEs tends to train for initial employment, while that in LMEs is ideally supposed to impart general knowledge and skills to equip the individual for future development. They point out that while there

has been a debate about which type of education is better, the fact that technology is advancing so rapidly means that it is becoming less important to train people in specific knowledge and more important to train them to deal with the unexpected. This indicates that a shift to LME-type general education may become necessary, and raises the question of whether the CCME model can be sustained without the special vocational training systems (see also Soskice 1999, 112).

Although the evidence did not turn out exactly as expected, it is still clear that these two political economy theories are very useful tools for analyzing military organizations, and further study is both warranted and important. If we understand these connections, we can infer from a knowledge of the political and economic organization of a country to the military's personnel structure, and vice versa. This line of inquiry will also produce valuable insights into the constraints on and capabilities of various military organizations, which in turn may yield clues to a state's civil-military relations and foreign policy-making processes. Who will serve? It is a question with significance far beyond the achievement of monthly recruiting targets.

Appendix A: Recruiting and Retention

Thus far, the scholarly literature (primarily U.S.) has identified several factors which affect recruiting and retention. These factors include the strength of the civilian job market, the popularity of higher education, the public perception of military service, personal connections with the military, the stress of multiple deployments, career advancement opportunities, pension benefits, and the disparity between military and civilian pay.¹ In all cases, however, what has remained a tacit assumption of the literature is that individuals are weighing military service against alternatives in the civilian labor market, and that indicates that another factor which ought to be important is the military's personnel management policies. These policies are what shape both the military's ability to manage its human resources and the individual's career expectations. Furthermore, these policies are a potential tool for addressing problems of recruiting and retention.

AA.1 Recruiting

Most studies looking at military recruiting have emphasized the impact of unemployment, but also show that it is not the only significant factor (e.g. Brown 1985;

¹ Beth J. Asch (1990) has also shown that the structure of recruiter incentives has an effect on recruiter effort and hence on the number of new enlistments, but [still need to find out how recruiter compensation works in my countries], and Asch was not able to say whether the variation was due to a cycle of effort and rest or to recruiters "poaching" future enlistees to sign up before the incentive deadline. Therefore it is not clear whether this has any real effect on the *total* number of enlistments.

Dale and Gilroy 1985; DeBoer and Brorsen 1989; Warner and Asch 2001). Nearly all these studies have also found that relative pay (Cook 1972; Ash, Udis, and McNown 1983; Brown 1985; Dale and Gilroy 1985; DeBoer and Brorsen 1989), fear of a draft (Cook 1972; Ash, Udis, and McNown 1983; DeBoer and Brorsen 1989), and educational benefits (Dale and Gilroy 1985) also have significant effects on the supply of military labor. It is still not entirely clear, however, how all these factors interact with one another. No one or two factors have proven entirely sufficient to make accurate predictions.

AA.1.1 Unemployment

The most popular explanation for recruiting patterns over the last several decades has been that the military absorbs people who cannot get jobs when the job market is tough, and suffers corresponding deficits when a strong economy makes it easy for people to get other jobs. Although Ash, Udis, and McNown (1983) claimed to find absolutely no evidence for an unemployment effect on recruiting, subsequent studies have argued that they were using inappropriate data (accessions rather than enlistment contracts) (Dale and Gilroy 1985) and that they failed to use the more appropriate pooled cross-sectional time series analysis method (Brown 1985). Nearly all studies since Ash, Udis, and McNown's have attempted to correct for these problems and have found large and significant effects for unemployment (Dale and Gilroy 1985; Brown 1985; Warner and Asch 2001; Warner, Simon, and Payne 2003). There is really

little question that the level of unemployment – especially the level of male youth unemployment – has a significant effect on the supply of military recruits.

AA.1.2 Pay Gap

Another very significant factor closely related to the question of unemployment is the perception of a “pay gap” between roughly equivalent military and civilian jobs. In theory, a potential employee should pick the job that pays more if the tasks and conditions are roughly equivalent. Considering that the conditions of military service are often more strenuous and uncomfortable than those of a civilian job, the military should have to pay a higher wage than an equivalent civilian position in order to attract average or above-average recruits. It can be assumed that there is a certain population which is attracted to military service for other than economic reasons, and they would not require a higher wage. However, it must also be assumed that, while this population is probably the most desirable from the military’s point of view, it also constitutes only a fraction of the total number of recruits needed. The fact that the American military, at least, is still able to recruit decent numbers of people with other economic options makes it clear that pay is not the only important factor, but there is no question that it is an important factor.

Research in the United States has certainly shown that pay elasticity seems to be high; that is, that even small increases in military pay yield sizeable increases in high quality recruits (Cook 1972; Brown 1985; Dale and Gilroy 1985; Warner, Simon, and

Payne 2003). Almost no military in an advanced industrial society, however, is in a position to be a pay leader (Leavitt 1996). Furthermore, empirical evidence shows that the American military, at least, has been able to recruit quality personnel in some occupational specialties despite pay gaps (Hosek et al. 2004), and has suffered recruiting problems despite relatively competitive pay in other specialties (Warner, Simon, and Payne 2003). On the retention side, research on other public employees has indicated that higher pay does not necessarily lead to job satisfaction (Leavitt 1996). Surveys of American military personnel have indicated that job satisfaction is an important predictor of intentions to remain in service (Kirby and Naftel 2000), and in general, that high job satisfaction and morale lead to better performance. Pay is thus another very significant factor, but not the whole story.

Trying to alleviate recruiting problems caused by unemployment cycles and weak pay ratios is very expensive. The most effective response for a government to make to problems caused by unemployment and uneven pay ratios is to offer high bonuses and pay increases in times of economic strength to try to entice people away from the civilian market. This is an extremely expensive practice (DeBoer and Brorsen 1989; Warner, Simon, and Payne 2003, 339), first because of the cost of the measures themselves, second because of the ripple effects on the military pay scale, and third because of the ripple effects over time (see e.g. Moelker et al. 2005, 48).

DeBoer and Brorsen (1989) estimated that, to keep the force size and quality level steady in the United States (given a decline in the male youth population), military pay would have to increase by around 3% per year. If, on the other hand, force size and pay were held constant, they estimated that the percentage of “low quality” recruits (i.e. those scoring below the 50th percentile on the Armed Forces Qualification Test: categories IV and IIIB) would jump from 5% to over 20% in just two years. In tough recruiting times, bonuses and pay raises ought to be directed at the lowest (i.e. entry-level) ranks. Unless all ranks’ pay is increased, however, the pay scales flatten to the point where there is a seriously diminishing marginal return for staying in the military for a career (Rosen 1992). Thus, if recruiting incentives are not to damage retention incentives, pay must be increased across the board, resulting in higher costs. Furthermore, it is usually not possible to cut military pay back once unemployment goes up and the increased entry-level pay is no longer needed, meaning that costs will stay high even when this is not necessary for recruiting or retention purposes. Bonuses can be necessary and good, and allowing the services somewhat flexible bonus budgets has been very effective in some cases (Hosek and Peterson 1985), but such ad hoc fixes are unlikely to solve all of a government’s problems.

AA.1.3 Higher education

Several U.S. studies have argued that the educational benefits the military offers are an important enlistment incentive (e.g. Brown 1985; Dale and Gilroy 1985; Warner,

Simon, and Payne 2003). This is true for both enlisted and officers, although in many cases the officers enjoy their education immediately, while the enlisted personnel must often wait until their service is concluded before they can move on to higher education.² If many young people who enlist in the military are interested in higher education, then it comes as no surprise that, when general chances for higher education improve, more young people choose to bypass the military and go straight into higher education (Asch, Kilburn and Klerman 1999; Warner, Simon, and Payne 2003; Asch, Du, and Schonlau 2004). Since the military particularly wants the type of high-quality young person who would be attracted to higher education, a general trend towards more higher education is likely to mean difficulty recruiting high-quality youth. At the same time, educational benefits and bonuses are unlikely to have much significance in a context where higher education is public and essentially cost-free.

AA.1.4 Public Perception

Three factors within the broader rubric of public perception of the military might be significant for recruiting: public awareness of military service opportunities, a positive or negative reputation for military service, and the level of physical risk associated with military service. While the evidence for the effects of awareness on

² The U.S. studies have also found significant differences in the way that educational benefits affect enlistment across service branches. Warner, Simon, and Payne (2003) found that educational benefits were far more important for the Army than for the Navy, and indicated that these results were consistent with other research.

enlistment is quite strong, there is only anecdotal evidence for the effects of military reputation, and research on the effects of risk perception has been inconclusive (see also below under “Retention”).

Warner, Simon, and Payne (2001 and 2003) found that youth propensity to enlist was significantly related to parents’ military service and to the percentage of a U.S. state’s male population over age 35 which had served in the military. Warner and Simon (2004) found that “recruiters continue to have the statistically most significant effect on high-quality enlistment”. In countries where conscription still exists, it functions as a sort of advertising, drawing in young people who would otherwise not have considered even a short stint in the military. Clearly, the more awareness there is of career opportunities in the military, the better a military’s recruiting position.

That is assuming, however, that the awareness has a positive tint. If the military is in the public eye because of negative incidents, recruiting is likely to be more difficult. It is fairly commonsensical to believe that scandals at home or failures abroad create a negative image of the military in the public mind. Very few scholars, however, have attempted to establish an empirical relationship between scandal and recruiting success.

For an organization such as the military, the factor of risk further complicates the notion of public image (Manigart 2005, 559f.). For some people, risk may be a positive incentive to join, while for others it may be a deterrent. Philippe Manigart has pointed out that, in the postmodern, risk-averse society, the realization that even peacekeeping

can be dangerous can make recruiting more difficult (Manigart 2005, 559). He argues that organizational prestige and risk interact with one another, so that high risk combined with low prestige has a much greater negative effect on recruitment than high risk in a high prestige context (Manigart 2005, 560). Thus, although the peacekeeping role has increased the prestige of the armed forces in many European countries (Manigart 2005), it must be remembered that they were starting from very different prestige positions from one another, and that the perception of risk has also gone up – perhaps more than the level of prestige.

AA.1.5 Personnel Tempo

Although the terms “operations tempo” and “personnel tempo” are often used interchangeably, they do in fact have different meanings, and in the context of recruiting and retention, personnel tempo (the average number of days per year a service-member spends deployed) is the more relevant measure. In general, more research has been done on how a high personnel tempo affects retention rather than enlistment. Moreover, some studies indicate that this factor is not at all simple – its effects on recruiting seem to show up differently in different demographic groups, it is difficult to tell whether it affects quality the same way it affects quantity, and it is difficult to tell whether any effects have to do with danger and strain as such, or with whether the danger and strain are widely

perceived by the public to be crucial or pointless.³ There is some evidence from the United States that demographic groups which tend to see the military as an avenue of economic advancement are less likely to enlist when the deployment and risk factors increase.⁴ On the other hand, the Netherlands has seen indications that their participation in the Afghanistan mission has had a significant positive effect on recruiting (Müller 2006). It is unlikely that labor market structure will have a differential effect when combined with operations or personnel tempo.

AA.2 Retention

AA.2.1 Pay and Bonuses

Several studies indicate the importance of competitive pay and generous bonuses for encouraging young people to re-enlist (Warner and Simon 1984; Hosek and Peterson 1985). Hosek and Peterson (1985) find that lump-sum (as opposed to installment) *bonuses* are an extremely cost-effective way to increase long-term re-enlistment. Surprisingly, they also find that *pay increases* tend to raise the number of personnel choosing short-

³ c.f. Feaver and Gelpi (2004) on supporting casualties in missions perceived to be legitimate and winnable.

⁴ See e.g. quotations in Reuters, "Military Academies Attract Fewer Applicants", CNN.com, Tuesday, 14 June 2005 <http://edition.cnn.com/2005/EDUCATION/06/14/usa.academies.reut/index.html> ; see also several references in Williams book – but most of them are again news articles or surveys rather than systematic studies.

term extensions of service rather than longer-term re-enlistment.⁵ Studies of slipping U.S. Air Force pilot retention in the early 1990s indicated that lucrative civilian options were the biggest reason for leaving the service (Stone et al. 1998). However, studies of the more recent pilot attrition problems in the late 1990s indicate that high operations tempo was the culprit (Taylor et al. 2000). It seems safe to say that, as with recruiting, pay and bonuses are important for retention, but are not the only important factors.

AA.2.2 Stress/Personnel Tempo

John T. Warner and Matthew S. Goldberg (1984) find that civilian-military pay differentials vary in their effect on retention, based on additional non-pecuniary factors. They look specifically at retention in Military Occupational Specialties (MOSs) in the Navy which involve long or frequent periods of sea duty as against those which involve very little sea duty. They find that it took much higher pay to induce re-enlistment in the stressful sea-duty MOSs than in the non-stressful ones. In fact, they find that re-enlistment in these high-stress MOSs is lower than other MOSs regardless of the level of pay. Warner and Goldberg also find that married personnel re-enlist at a higher rate than unmarried personnel, and speculate that this might be due to the availability of non-pecuniary benefits such as health care. It is important to keep in mind that their analysis was done before the end of the Cold War, and thus before the age of extended

⁵ They note, however, that persons motivated by a bonus to sign on for an extra term are more likely to leave once that term is over. They cite only "other research".

and/or multiple deployments. Other studies have tended to show that spousal dissatisfaction is one of the top reasons for leaving the service (Orthner 1986; Department of the Army 1987; Kirby and Naftel 2000).

Other work has focused specifically on the effect that deployment or multiple deployments have on the individual service-member's desire to remain in military service. Brian J. Reed and David Segal (2000) point out that, at the time they were writing, force size and military spending had declined by 35% and 38% respectively since the end of the Cold War, while the use of military force was up 300%. This can only mean that military personnel are being asked to do much more than they used to do. Reed and Segal find that, while individual morale tends to suffer from multiple deployments, intentions to re-enlist were unaffected. Penny Pierce (1998) also found that U.S. Air Force women's retention rates were not affected by deployment *as such*, but rather by the stresses created when mothers had to deploy away from children. Kirby and Naftel (2000) point out that "the effects of mobilization [or deployment] can potentially be either positive or negative. The experience of being mobilized [or deployed] may well enhance unit cohesion and foster a sense of pride and belonging ... However, this effect is likely to be heavily dependent on the circumstances, length, and frequency of mobilization" (259). Kirby and Naftel find a positive relationship between mobilization (for reservists) and intentions to re-enlist; "reported income loss and additional expenses attendant on being mobilized did not have any effect on retention"

(273). It is important to keep in mind, however, that these attitudes might change if the operation were an unpopular one.

AA.2.3 Career Advancement and Skills Transferability

Clearly, an employee's prospects for advancing his or her career are important to whether he or she chooses to stay with the current employer or not. The problem for the military is making the promise of a career credible. The military can offer some paths for talented individuals to stay in a rewarding career for most of their working lives, but it cannot guarantee that everyone who is potentially qualified will be able to stay and advance. Militaries which have "up-or-out" promotion systems force those who cannot advance to leave, and militaries with no "up-or-out" allow people to stay, but cannot necessarily advance them. Pay in most militaries is attached to rank rather than time in service, so even the promise of job security does not necessarily guarantee any advancement in pay or position.⁶ This being said, promotion in the military is nearly always linked to time in service as well as aptitude for the higher position, so the military is able to promise people at least an opportunity of quite regular advancement

⁶ One of the major problems here is the question of whether those with special skills needed by the military must necessarily also have command competence. In private-sector terms, one could conceivably keep a technical specialist in a job of the same "rank" for his whole career, as long as he got pay raises commensurate with his skill and usefulness increases. However, there is an argument to be made that the military, as an organization which might suffer large, sudden, and unpredictably distributed personnel losses, needs its employees to be somewhat more fungible than civilian employers do.

and increasing responsibility, which many firms in the private sector cannot or do not do.

Transferability of skills is also a key factor in studies done in the United States: the more transferable one's skills, the more employment options one has outside the military, the more likely one is to be enticed away by higher pay or an easier life (Rosen 1992). The promise of useful and transferable skills is a big incentive to join the military, but the people who join the military to learn a useful civilian skill are practically by definition unlikely to stay in the military. Hosek et al. (2004) point out, however, that the military may offer *continuing* training that is attractive enough to keep people in at least until they are close enough to retirement vesting that they stay for that. They look specifically at Information Technology personnel, and find that the military was able to retain even these sought-after individuals at a reasonable rate due to the value of further training. Once again, it is important to remember that this finding is in the U.S. context, where the military enjoys a large technology and R&D budget. In countries where the cutting edge is more likely to be found in the private sector, it is unlikely that anyone would find military service in such a "civilian" field at all attractive.

AA.2.4 Pension Expectations

The way that the military pension system is structured is a key factor in how retention works. In the U.S. context, military personnel become vested for a pension only after twenty years of service. The vast majority of enlisted personnel would have to

re-enlist at least three times to become eligible for retirement benefits. For both enlisted and officers, pension benefits seem to come into play only once they enter the horizon of the very near future. Sherwin Rosen has called pension benefits the “dominant force” for retention, but only *after* the second (enlisted) tour (Rosen 1992, 232). Several scholars have criticized the American system, as both unfair (for not vesting those who serve less than 20 years) and as creating bad incentives for a mass exodus at the twenty year mark (Williams 2004). It seems obvious that the promise of a generous pension could be a very useful tool for retention, and that it ought to be coordinated with other incentives to optimize the military’s desired retention pattern.

AA.2.5 Conscription

Studies in the U.S. found that people who were drafted were less likely to re-enlist than volunteers. Thus, for the U.S., the shift to an all-volunteer force led to better retention rates and thus to an older average age for the force. This is considered to be a good thing in terms of individual experience levels and overall cost-effectiveness. The European draft functions very differently from the American one, however, and there is good anecdotal reason to believe that large numbers of people who choose to serve for longer in the military do so because of a positive experience as a draftee. Indeed, the German military draws somewhere between 30% and 50% of its regular soldiers from the ranks of the conscripts (Huber 1998; conversation with *Oberstleutnant* Michael Buchfeld). The male youth population usually falls into five categories: 1. those who

would not choose to serve in the military under any circumstances, 2. those who would prefer not to serve, 3. those who are completely indifferent, 4. those who have no objections to serving, and 5. those who would freely choose to serve. The way conscription works in Europe now (with the exceptions of Greece and Switzerland), the first category does not serve, and the second category may serve but will do only the minimum. Those who would freely choose to serve and those who have no objections to serving are likely to sign on for longer than the minimum conscript term, in order to get higher pay and more excitement. It is among the totally indifferent where conscription makes a real difference: these are young people who would never have thought of joining the military on their own, but who may find that they rather like it once they try it.

AA.3 Summary of Important Factors

Warner, Simon, and Payne (2003) conclude that even the very significant factors they included in their model (unemployment, numbers of recruiters, spending on advertising, relative pay, bonuses, educational benefits, intentions to attend college, percentage of veterans in the population, and population density) still fail to account for a sizeable percentage of recruiting decline. They also find that increasing first-term basic pay would be the most expensive strategy for improving high-quality recruiting (ibid 339). The most cost-effective methods for improving high-quality recruiting would be

expanding college benefits and bonuses. Anticipated risk interacted with a negative organizational reputation depresses enlistment (Manigart 2005).

For retention, the main factors are pay ratios, bonuses, job satisfaction and morale, unemployment, career opportunities and transferability of skills, training and educational benefits, and retirement benefit structure. There is still no clear evidence of how operations or personnel tempo affect intentions to re-enlist. Most studies of retention have concluded that, while deployment as such does not depress re-enlistment, some of the stresses associated with deployment may lower morale and cause fewer people to be satisfied with a military career.

While job satisfaction, skills training, career advancement opportunities, and the like are recognized as important factors for retention, there has been far less attention to how such factors might affect recruiting (see Asch and Warner 2001). What evidence there is tends to indicate that an individual's beliefs about these factors play an important role in his decision to enlist. Asch and Warner's (2001) model indicates that decisions about re-enlistment have a relatively long time horizon; it is at least plausible to think that the same is true of the initial decision to enlist. Unfortunately, the few studies which have been done on policy variables have concentrated on pay, promotion, and pension/retirement schemes (Asch and Warner 2001; Smith 2001; one exception to this rule is Hosek et al. 2004, on the effects of further skills training on the retention of IT personnel).

It is not my intention to show that the studies done in the United States identified the wrong independent variables. I argue, rather, that many of these variables function differently in different economic contexts, and that therefore their effects on policy, recruiting, and retention, will also differ by economic context. When these variables are interacted with the additional independent variable of market economic type (LME/CME), they should behave differently. The assumption throughout is that we are mainly concerned with “quality” personnel, as opposed to those people who have no other employment options besides the military.⁷

AA.4 Factors Influencing Recruiting: Hypotheses

Based on the discussion of differing market types, we know that LMEs are characterized by greater flexibility in the job market than CMEs, particularly at the mid-career level. We also know that LMEs prize general skills much more highly than do CMEs. In general, people in an LME ought not to be deterred from serving in the military for short or mid-length periods of time, because they will be relatively confident both that they will be eligible to be hired in mid-career and that they will acquire valuable general skills in the military, which can be applied to many private and public

⁷ By “quality” I refer to people possessing a certain school leaving certificate and scoring above a certain level on an aptitude exam. One of the problems with doing this research comparatively is that the operationalization of this definition may pose problems. Conceptually, however, it is useful to think of the American definition of “quality” as referring to a person who has a secondary school leaving certificate entitling him to post-secondary education and who has scored above the 50th percentile on a standardized aptitude test.

sector jobs. Thus, even people who are not sure about or not interested in a full military career are not frightened away by the prospect of being out of their sector's loop or not being employable later because of age. People in CMEs generally would be willing to serve short-term *only* if they could be guaranteed further civilian-certified education.

H1: LMEs should generally be more successful at recruiting quality personnel than CMEs

One of the most important factors influencing recruiting was the unemployment rate - especially male youth unemployment. There are two reasons to believe, however, that unemployment's effects on recruiting will differ depending upon the type of labor market. First, one of the features that varies with market economic type is unemployment protection and benefits.⁸ In a flexible LME environment, where unemployment and social welfare programs are less generous, the military's attractiveness as an employer increases dramatically when jobs become scarce. In CMEs, on the other hand, where unemployment benefits and welfare programs tend to be very generous and designed to allow people to seek the job most appropriate to their skills, military recruiting is not likely to benefit very much from an economic downturn. Second, the more flexible labor market in an LME lowers the costs of taking any given

⁸ The OECD reports that unemployment benefits as a percentage of employed income are generally highest in the Scandinavian and continental European countries and lowest in Anglo-Saxon and southern European countries as well as Japan. The exceptions to this rule are New Zealand, Australia, and Ireland, all of which had unemployment benefits above the OECD average, and Sweden, whose unemployment benefits were below average, but whose total social protection benefits were among the highest (i.e. when social welfare payments are factored in). The USA, Canada, and Great Britain had particularly low unemployment benefits, when compared to the other most highly developed OECD countries. See *Society at a Glance: OECD Social Indicators* 2005 edition, SS5.1.

job. Any job is better than no job, because it constitutes income in the present and experience for the future. It is very easy to get out of a job and find another as soon as the market improves. CMEs, on the other hand, tend to have more rigid employment regulation, and it is neither quite as easy to get out of a job even if one has a better prospect, nor is it necessarily a bonus to have had a job unrelated to one's main sectoral interests, or a lower-paying job than one had had before. Thus we expect unemployment to encourage joining the military in both market types, but to have a much more pronounced effect in LMEs than in CMEs.

H2: A boom or bust will have a much more noticeable effect on military recruiting in an LME than in a CME.

The second main factor was military-civilian pay ratios, and although the *effect* of differences in pay is unlikely to differ across market types, the actual ratios themselves are likely to differ. LMEs are likely to have much bigger problems maintaining attractive pay ratios than CMEs, since CME civilian pay scales tend to be compressed just like those in the military. In a CME, the difference between what an engineer in the private sector would earn and what a military engineer would earn is not very large. Certainly, that difference is not as large as it would be in an LME. Even in an LME, however, starting salaries are less likely to present high differentiation, and recruiting should be hurt only in those fields where starting salaries are exceptionally high (e.g. IT, engineering). So the effect of marginal pay benefits is the same across LMEs and CMEs,

but marginal pay benefits are more likely to exist in certain sectors in LMEs and thus to make recruiting in those sectors in LMEs more difficult.

H3: in LMEs, recruiting should be more difficult in sectors with high entry-level pay; in CMEs, sector should not matter as much

Above, I mentioned that an organization's reputation is an important factor for recruiting, especially when interacted with the stress or risk associated with service. The effects of both negative organizational reputation alone and of negative reputation in addition to high deployment are likely to be more pronounced in CMEs than in LMEs. Coordinated Market Economies feature more unemployment protection and put less pressure on individuals to take jobs they do not necessarily want. People have more choice about whether to enter employment at all, and therefore even small negative changes in the public perception of military service will have large effects on recruiting in a CME. In an LME, however, the most pressing need is to have *some* employment, and therefore while bad reputation will certainly turn some people away from an organization, the effect will not be as pronounced as in a CME.

H4: Scandals or military incompetence will have a greater negative effect on recruiting in a CME than in an LME.

H5: Scandals or incompetence interacted with high personnel tempo will have more negative effects on recruiting than either factor alone, with the difference being much greater in a CME than in an LME.

The United States used conscription as an incentive for voluntary enlistment, and it was effective because of the clear advantage volunteers had over conscripts. Such an effect should not vary with market context, but rather by the nature of conscription.⁹ Conscription is likely to have an enhancing effect on voluntarism in a context where conscript service is clearly inferior to volunteer service (e.g. when being conscripted means going directly to combat in a low rank with low pay and no guarantee that one would be released within a given time frame). When conscript service is only barely inferior, or approximately even with volunteer service, it is unlikely to generate a large number of volunteers (e.g. where conscripts are paid less, but must serve only a very short period of time and are put in no danger whatsoever). The other main difference is that when conscription means short, meaningless service, those who DO volunteer to avoid it are likely to be better, more reliable soldiers because of their willingness to encounter risk and adventure. This does not necessarily mean they will be the more

⁹ It just so happens that the nature of conscription has varied with market type in post-WWII advanced democracies. It is not entirely clear why the nature of conscription should vary with economic type. Eliot Cohen (1985) has argued that one of the factors determining whether a country uses conscription or not is whether it has a liberal or egalitarian ideology. Liberal states value freedom and voluntarism, while egalitarian states value fairness and equal distribution. This clearly predisposes the Anglo-Saxon and commonwealth countries to volunteer forces, and the continental countries to conscript or militia forces, and it is also a factor which plays into why a country has a Liberal vs. a Coordinated Market Economy. Ideology, however, is not the whole story. The point of real interest here is that the liberal countries have used conscription in a very different way than the egalitarian ones. The U.S., UK, and Australia were all legally capable of sending conscripts abroad on operations in the post-WWII era; Canada had implemented conscription only under the extreme conditions of the World Wars and with a great deal of political controversy. The continental countries, however, have generally considered their conscripts to be for homeland defense only, and often have legal barriers to sending them out of country. It is this difference – possibly attributable to the liberal states’ positions as “insular” powers – that makes conscription an incentive for voluntary enlistment in the liberal states and not in the egalitarian ones.

highly skilled or educated, but they are more likely to possess certain character and psychological traits suiting them to military service.

Pay probably also interacts with issues of higher education. In the United States, the cost of higher education works against marginal entry-level pay benefits on the civilian side, because the military can make education and training less costly. In most other developed countries, however, further education is essentially cost-free. This indicates that marginal pay benefits ought to matter even more in other countries than they do in the U.S., and that educational bonuses and benefits will not be useful in other countries. Trends toward greater youth participation in higher education shrink the pool of young people interested in military service. Such trends are unlikely to have differential effects depending on market type.

Variables such as youth population, recruiter presence and effort, and the presence of a veteran or influencer population also should not vary by market type.

AA.5 Factors Influencing Retention: Hypotheses

Military-civilian pay ratios play an even larger role in retention than they do in recruiting. It is as time-in-job increases that stark pay differentials start to emerge. Pay scales in LMEs, being de-regulated and market-driven, tend to cover a much wider band of possible income than the regulated, compressed pay scales in CMEs. Liberal Market Economies thus present a much greater likelihood of marginal benefits to the able service-member who decides to leave service. In a CME, where the difficulty of mid-

career lateral changes may be a deterrent to recruits and pay scales are flatter through the entire private sector (Hall and Soskice 2001, 21), retaining personnel ought to be much easier than it is in an LME. In fact, CMEs might find themselves with the opposite difficulty of being saddled with a large number of people who do not want to leave when the organization would like them to (Williams 2005). Therefore, in LMEs, we should expect to see greater retention problems with *high quality* personnel, because the private sector can offer them positions and pay which may be orders of magnitude greater than what they enjoy in the military. Coordinated Market Economies should not have much difficulty retaining high quality personnel.

It will be easier for LME militaries to maintain a svelte figure, but there is no guarantee that the people who want to be separated are the same people that the military would like to see leave. Retaining quality personnel is difficult in an economic context where they are highly desired by a private sector company which is able to tailor its incentives to the person or type of person it wants. Militaries, both by their nature as public institutions and by their need to downplay differences among service-members, are often not able to tailor long-term incentives to particular individuals, and thus are at a disadvantage with respect to retaining the most qualified individuals.¹⁰

H6: Militaries will be better able to retain quality personnel in CMEs than in LMEs.

¹⁰ Cindy Williams (2004) and others have recently argued that it might be possible to reform the U.S. military compensation system to be flexible in precisely this way. Once again, it is not clear what all the other consequences of such a change might be: issues of teamwork, internal jealousy, and so forth might be more problematic for the military than for other types of organizations.

H7: Militaries will be better able to separate (voluntarily) sufficient numbers of personnel in LMEs than in CMEs (not taking quality into account).

Unemployment's effect on retention seems trickier to get at than its effect on recruiting. In the retention scenario, the person already has a job and is contemplating leaving it. For the highly-skilled person in an LME, it will still be possible to find a better-paying job even in a high unemployment situation. That being said, the pay differentials are likely to fluctuate based on the strength of the labor market, since military pay will stay more stable than pay in the private sector. For the low-skilled person in an LME, the security of a military job is much better than a high risk of being unemployed, and the pay differentials are not likely to fluctuate quite as much as for a highly skilled person.

In a CME, the highly-skilled person is less likely to be able to find a job outside given the job safeguards in place for their peers. Lower-skilled people might still be able to find another job (since low-skilled work is high turnover) (Erlinghagen 2004, 183). Both high- and low-skilled would fear the state of unemployment less, though, because of high benefits. Thus, the incentives to *leave* service would have to reach a higher threshold in a CME than in an LME for a high-skilled person, but not for a low-skilled person. It would be necessary to disaggregate unemployment by sector and skills level to get at a real relationship. No overall measure of unemployment will be meaningful for retention. Sectoral unemployment will interact with the individual's "internal"

incentives to leave service (e.g. job satisfaction), *and* with the skill level (in that sector) of the person involved, *and* with market type.

H8: A boom or bust will have a more noticeable effect on military retention of total personnel in an LME than in a CME.

H8a: A boom or a bust will have a more noticeable effect on military retention of low-quality personnel than of high-quality in an LME; in a CME, it should be reversed.

Two closely related factors with a great deal of influence over retention are career opportunities and transferability of skills. In an LME, career lines are somewhat fluid, and one does not necessarily have to pass through one level to reach another. Coordinated Market Economies, however, are characterized by highly structured career paths, where appropriate credentials must be produced in order to advance to the next level. Similarly, in the military hierarchy it is impossible (except in wartime) to skip a rank or get a particular kind of advancement without having had the standard required experiences. For both high- and low-skilled persons in a CME, a military career is likely to offer them approximately the same chances at pay and advancement that a civilian career would (assuming no up-or-out system).

The very inflexibility of the CME market which helps the military to retain qualified personnel also makes it necessary for the military to offer overly-generous re-training, unemployment, and early retirement benefits in order to get rid of excess career-hopefuls. The use of an up-or-out promotion system might be a partial cure for a

lack of voluntary early-leavers, but CMEs tend to be characterized by strong employee organization and representation, and up-or-out might not be feasible or even desirable.¹¹

The most important question is whether CMEs prove better able to retain *quality* personnel than LMEs. It seems likely that this is the case, for two reasons: first, as mentioned already, LME private sectors are more likely to be able to offer more highly-skilled people much larger marginal benefits than CMEs, and they are less likely to care whether the skills are very specific. Second, because of the need for very specialized skills in CMEs and because of the usually close cooperation between the works councils (employee organizations) and the employers' organizations, the labor market for lower-skilled workers is actually *more* flexible than that for more highly specialized skilled workers. Thus, lower-skilled workers deciding to leave the military in a CME are actually more likely to be able to find roughly equivalent work than are highly-skilled workers.¹²

Reinforces H6

Furthermore, the opportunities to advance in the military are externally limited. Unlike in an LME private sector, in the military it is impossible to create a position for an

¹¹ The up-or-out system has both advantages and disadvantages. See several chapters in Williams 2004, and Asch and Warner 2001.

¹² This is according to the conversation I had with David Soskice on 13 June 2005, but Sven Gareis has argued in personal communication that many employers in Germany are now looking at military experience as a plus.

individual in order to give him or her the necessary experience and credentials to advance. The number of promotions in a military depends primarily on the number of people at a given rank which the military needs and how many of them leave in any given year. Should the military need to downsize and the competition within a cohort be strong, individual talent will be no guarantee for promotion. If the services are desperate for higher numbers, on the other hand, lower competence is not necessarily a bar to promotion. In an LME, these facts make a military career somewhat more risky for a high-skilled person than a career in the private sector would be, because advancement in the private sector is more reliably tied to skill and competence. By the same token, the military is somewhat more attractive for a low-skilled person in an LME, because there is at least some chance that he could advance despite his lack of competitive skills.¹³ Lower quality people who choose to serve also benefit enormously from the work experience and training they receive in the military, greatly increasing their chances of skilled post-military employment and thus benefiting society as a whole.

¹³ I stress that this is not the same thing as saying that it is easier for low-skilled people to be promoted, or that the military is more likely to promote low-skilled people, or that low-skilled people constitute the majority of those promoted. The point is merely that because military force strength is set based on strategic planning and without reference to the quality of the personnel, there is a chance that a highly-skilled person might *not* be promoted because there are not enough positions to promote *all* the highly-skilled people in a given cohort. Beyond this, there is a point at which ALL military personnel, regardless of competence, must retire and, usually, seek new work, which is disruptive and involves some uncertainty. The risk of not advancing in the private sector is almost nil, since a truly highly skilled person can always either force the promotion or leave for a better position elsewhere. Thus, to the highly skilled person, attempting to make a career of the military is a riskier proposition than attempting to make it to the top in the private sector. For the low-skilled person, on the other hand, the military represents a chance that he might be advanced *despite* his low skills, because the military needs to fill out a certain force requirement. The low-skilled person's risk of not "making it" is far higher in the private sector (in an LME), where he will depend entirely on his (low) skills.

Reinforces H6

One of the reasons that a full career in the military is more attractive to a highly skilled person in a CME than in an LME (given an equal initial propensity to serve) has to do with transferability of skills. In an LME, the range of skills which are transferable from the military to nearly any civilian occupation is larger than the range of skills transferable from the military to the civilian in a CME. Once again, the more skills one acquires in the military, the greater one's chances for a large leap forward in an LME. In a CME, only sector-specific skills are likely to lead to a leap forward, and it is not likely to be a big leap.

Reinforces H6

Personnel tempo, although not fully understood, seems to interact with other factors: whether an individual is deployed only once or multiple times, whether the spouse is dissatisfied, whether the organization's reputation is healthy, and whether the operations are popular. In an LME, job dissatisfaction ought to lead to exit because the prospect of finding another job (given a decent economy) is quite good. It is not entirely clear what to expect in a CME, since job dissatisfaction would normally also lead to high exit rates because of reliance on the unemployment scheme, but must be somewhat constrained by the more stringent terms of contract common in CMEs. This factor requires more research in single-country and comparative contexts alike.

Finally, there is the question of how conscription affects retention. The all-volunteer force's better retention rate is an argument in its favor in the LME context, since retention is a serious difficulty. Because of the different dynamic of conscription in European CMEs, however, it is not at all clear that conscription in that context leads to worse retention rates. Nor is it obvious that CME militaries should *want* to increase retention.

I mentioned above the problem of a general lack of data on which recruiting and retention hypotheses might be tested (see Introduction). Another serious problem which impeded the testing of any hypotheses on recruiting and retention related to the definition and measurement of "quality" personnel. Of course each military has its own understanding of "quality", but theoretically speaking it should be possible to devise a definition for each country such that they are roughly comparable. The American definition of "high quality recruits" is (for enlisted) those scoring above the 50th percentile on the Armed Forces Qualification Test (AFQT), and possessing a school leaving certificate.¹⁴ A more general definition might have involved simply an above average score on an aptitude test and an above-passing school leaving certificate. Three things impeded the use of such a general definition: first, not every military administers an aptitude test to all applicants. Second, even where psychometric testing of some kind

¹⁴ Most studies of the relationship between quality and performance focus on enlisted personnel, possibly because they have more specifically-defined tasks to perform, which are in turn easier to evaluate.

was used (aptitude or attitude), the results were not necessarily compiled. Third, most countries have more differentiated school leaving certificates than the United States, and comparing their relative value or even their diagnostic meaning is not easy. Any researcher who wishes to pursue a study of recruiting and retention will need to take these difficulties into account.

Appendix B: Military Ranks

United Kingdom

Royal Army	Royal Navy	Royal Marines	Royal Air Force
Officers			
Field Marshal	Admiral of the Fleet		Marshall of the Royal Air Force
General	Admiral	General	Air Chief Marshal
Lieutenant-General	Vice-Admiral	Lieutenant-General	Air Marshal
Major-General	Rear-Admiral	Major-General	Air Vice-Marshal
Brigadier	Commodore	Brigadier	Air Commodore
Colonel	Captain	Colonel	Group Captain
Lieutenant-Colonel	Commander	Lieutenant-Colonel	Wing Commander
Major	Lieutenant-Commander	Major	Squadron Leader
Captain	Lieutenant	Captain	Flight Lieutenant
Lieutenant		Lieutenant	Flying Officer
	Sub-Lieutenant		
Second Lieutenant		Second Lieutenant	Pilot Officer
	Midshipman		Acting Pilot Officer
Officer Cadet	Cadet	Cadet	Officer Cadet
Enlisted			
Warrant Officer Class I	Warrant Officer	Warrant Officer Class I	Warrant Officer
Warrant Officer Class II		Warrant Officer Class II	
Staff Sergeant	Chief Petty Officer	Staff Sergeant	Flight Sergeant/ Chief Technician
Sergeant	Petty Officer	Sergeant	Sergeant
Corporal		Corporal	Corporal
	Leading Rating		
Lance Corporal		Lance Corporal	
Private	Able Rating	Marine	Senior Airman/ Junior Technician
	Ordinary Rating		Leading Aircraftman
			Aircraftman

Ireland

Army	Navy	Air Corps
Officers		
Lieutenant General		
Major General		
Brigadier General	Commodore	Brigadier General
Colonel	Captain	Colonel
Lieutenant Colonel	Commander	Lieutenant Colonel
Commandant	Lieutenant Commander	Commandant
Captain	Lieutenant	Captain
Lieutenant	Sublieutenant	Lieutenant
Second Lieutenant	Ensign	Second Lieutenant
Officer Cadet	Officer Cadet	Officer Cadet
Enlisted		
Battalion Sergeant Major	Warrant Officer	Regimental Sergeant Major
Battalion Quartermaster Sergeant	Senior Chief Petty Officer	Regimental Quartermaster Sergeant
Company Sergeant	Chief Petty Officer	Flight Sergeant
Company Quartermaster Sergeant	Senior Petty Officer	Flight Quartermaster Sergeant
Sergeant	Petty Officer	Sergeant
Corporal	Leading Seaman	Corporal
Private 3 Star	Able Seaman	Airman First Class
Private 2 Star	Ordinary Seaman	Airman Second Class
Recruit	Seaman 3 rd Class/ Apprentice/ Recruit	Apprentice

United States of America

Army	Navy	Marine Corps	Air Force
Officers			
General of the Army	Fleet Admiral		General of the Air Force
General	Admiral	General	General
Lieutenant-General	Vice Admiral	Lieutenant-General	Lieutenant-General
Major-General	Rear Admiral Upper Half	Major-General	Major-General

Brigadier-General	Rear Admiral Lower Half	Brigadier-General	Brigadier-General
Colonel	Captain	Colonel	Colonel
Lieutenant-Colonel	Commander	Lieutenant-Colonel	Lieutenant-Colonel
Major	Lieutenant-Commander	Major	Major
Captain	Lieutenant	Captain	Captain
First Lieutenant	Lieutenant Junior Grade	First Lieutenant	First Lieutenant
Second Lieutenant	Ensign	Second Lieutenant	Second Lieutenant
Cadet	Midshipman	Midshipman	Cadet
Warrant Officers			
Chief Warrant Officer 5		Chief Warrant Officer 5	
Chief Warrant Officer 4	Chief Warrant Officer 4	Chief Warrant Officer 4	
Chief Warrant Officer 3	Chief Warrant Officer 3	Chief Warrant Officer 3	
Chief Warrant Officer 2	Chief Warrant Officer 2	Chief Warrant Officer 2	
Warrant Officer 1		Warrant Officer	
Enlisted			
Command Sergeant Major/ Sergeant Major	Master Chief Petty Officer	Master Gunnery Sergeant/ Sergeant Major	Chief Master Sergeant/ First Sergeant
First Sergeant/ Master Sergeant	Senior Chief Petty Officer	First Sergeant/ Master Sergeant	First Sergeant/ Senior Master Sergeant
Sergeant First Class	Chief Petty Officer	Gunnery Sergeant	First Sergeant Master Sergeant
Staff Sergeant	Petty Officer 1 st Class	Staff Sergeant	Technical Sergeant
Sergeant	Petty Officer 2 nd Class	Sergeant	Staff Sergeant
Corporal Specialist	Petty Officer 3 rd Class	Corporal	Senior Airman
Private First Class	Seaman	Lance Corporal	Airman First Class
Private E-2	Seaman Apprentice	Private First Class	Airman
Private	Seaman Recruit	Private	Airman Basic

Germany: Bundeswehr

Army (Heer)	Navy (Marine)	Air Force (Luftwaffe)
Officers (Offiziere)		
<i>General</i>	<i>Admiral</i>	<i>General</i>
<i>Generalleutnant</i>	<i>Vizeadmiral</i>	<i>Generalleutnant</i>

<i>Generalmajor</i>	<i>Konteradmiral</i>	<i>Generalmajor</i>
<i>Brigadegeneral</i>	<i>Flotillenadmiral</i>	<i>Brigadegeneral</i>
<i>Oberst</i>	<i>Kapitän zur See</i>	<i>Oberst</i>
<i>Oberstleutnant</i>	<i>Fregattenkapitän</i>	<i>Oberstleutnant</i>
<i>Major</i>	<i>Korvettenkapitän</i>	<i>Major</i>
<i>Stabshauptmann</i>	<i>Stabskapitänleutnant</i>	<i>Stabshauptmann</i>
<i>Hauptmann</i>	<i>Kapitänleutnant</i>	<i>Hauptmann</i>
<i>Oberleutnant</i>	<i>Oberleutnant zur See</i>	<i>Oberleutnant</i>
<i>Leutnant</i>	<i>Leutnant zur See</i>	<i>Leutnant</i>
NCOs (Feldweibel)		
<i>Oberstabsfeldweibel</i>	<i>Oberstabsbootsmann</i>	<i>Oberstabsfeldweibel</i>
<i>Stabsfeldweibel</i>	<i>Stabsbootsmann</i>	<i>Stabsfeldweibel</i>
<i>Hauptfeldweibel/Oberfähnrich</i> (officer cadets)	<i>Hauptbootsmann/ Oberfähnrich</i> <i>zur See</i>	<i>Hauptfeldweibel/Oberfähnrich</i>
<i>Oberfeldweibel</i>	<i>Oberbootsmann</i>	<i>Oberfeldweibel</i>
<i>Feldweibel/Fähnrich</i> (officer cadets)	<i>Bootsmann/ Fähnrich zur See</i>	<i>Feldweibel/Fähnrich</i>
Technical NCOs (Fachunteroffiziere)		
<i>Stabsunteroffizier</i>	<i>Obermaat</i>	<i>Stabsunteroffizier</i>
<i>Unteroffizier/Fahnenjunker</i> (officer cadets)	<i>Maat/Seekadett</i>	<i>Unteroffizier/Fahnenjunker</i>
Private Soldiers (Mannschaften)		
<i>Oberstabsgefreiter</i>	<i>Oberstabsgefreiter</i>	<i>Oberstabsgefreiter</i>
<i>Stabsgefreiter</i>	<i>Stabsgefreiter</i>	<i>Stabsgefreiter</i>
<i>Hauptgefreiter</i>	<i>Hauptgefreiter</i>	<i>Hauptgefreiter</i>
<i>Obergefreiter</i>	<i>Obergefreiter</i>	<i>Obergefreiter</i>
<i>Gefreiter/Unteroffizieranwärter/ Offizieranwärter</i>	<i>Gefreiter/Unteroffizieranwärter/ Offizieranwärter</i>	<i>Gefreiter/Unteroffizieranwärter / Offizieranwärter</i>
<i>Schütze/Flieger</i>	<i>Matrose</i>	<i>Schütze/Flieger</i>

Netherlands

Royal Netherlands Army (Koninklijke Landmacht)	Royal Netherlands Navy (Koninklijke Marine - Vloot)	Royal Netherlands Marines (Koninklijke Marine – Mariniers)	Royal Netherlands Air Force (Koninklijke Luchtmacht)
Officers (Officieren)			
	<i>Admiraal</i>		
<i>Generaal</i>	<i>Luitenant-Admiraal</i>	<i>Generaal</i>	<i>Generaal</i>
<i>Luitenant-Generaal</i>	<i>Vice-Admiraal</i>	<i>Luitenant-Generaal</i>	<i>Luitenant-Generaal</i>

<i>Generaal-Majoor</i>	<i>Schout-bij-nacht</i>	<i>Generaal-Majoor</i>	<i>Generaal-Majoor</i>
<i>Brigade-Generaal</i>	<i>Commandeur</i>	<i>Brigade-Generaal</i>	<i>Brigade-Generaal</i>
<i>Kolonel</i>	<i>Kapitein ter zee</i>	<i>Kolonel</i>	<i>Kolonel</i>
<i>Luitenant-Kolonel</i>	<i>Kapitein-luitenant ter zee</i>	<i>Luitenant-Kolonel</i>	<i>Luitenant-Kolonel</i>
<i>Majoor</i>	<i>Luitenant ter zee der 1. klasse</i>	<i>Majoor</i>	<i>Majoor</i>
<i>Kapitein/Ritmeester</i>	<i>Luitenant ter zee der 2. klasse oudste categorie</i>	<i>Kapitein/Ritmeester</i>	<i>Kapitein/Ritmeester</i>
<i>Eerste Luitenant</i>	<i>Luitenant ter zee der 2. klasse</i>	<i>Eerste Luitenant</i>	<i>Eerste Luitenant</i>
<i>Tweede Luitenant</i>	<i>Luitenant ter zee der 3. klasse</i>	<i>Tweede Luitenant</i>	<i>Tweede Luitenant</i>
<i>Vaandrig/Kornet</i>			<i>Vaandrig</i>
NCOs (Onderofficieren)			
<i>Adjutant-onderofficier</i>	<i>Adjutant-onderofficier</i>	<i>Adjutant-onderofficier</i>	<i>Adjutant-onderofficier</i>
<i>Sergeant-Majoor/Opperwachtmeester</i>	<i>Sergeant-Majoor</i>	<i>Sergeant-Majoor</i>	<i>Sergeant-Majoor</i>
<i>Sergeant der eerste klasse/Wachtmeester der eerste klasse</i>	<i>Sergeant</i>	<i>Sergeant</i>	<i>Sergeant der eerste klasse</i>
<i>Sergeant/Wachtmeester</i>			<i>Sergeant</i>
Private soldiers (Manschappen)			
<i>Korporaal der 1. klasse</i>	<i>Korporaal</i>	<i>Korporaal</i>	<i>Korporaal der 1. klasse</i>
<i>Korporaal</i>			<i>Korporaal</i>
<i>Soldaat der 1. klasse</i>	<i>Matroos der 1. klasse</i>	<i>Marinier der 1. klasse</i>	<i>Soldaat der 1. klasse</i>
	<i>Matroos der 2. klasse</i>	<i>Marinier der 2. klasse</i>	
<i>Soldaat</i>	<i>Matroos</i>	<i>Marinier der 3. klasse</i>	<i>Soldaat</i>

Appendix C: U.S. Army Career Management Fields and Branches

These Tables are taken directly from Army Manual FM 7-21.13 Appendix F

Career Management Fields of the Army's Enlisted Soldiers

Combat Arms	Combat Support	Combat Service Support
11 - Infantry 13 - Field Artillery 14 - Air Defense Artillery 15 - Aviation 18 - Special Forces 19 - Armor 21 – Engineer	21 - Engineer 25 - Communications & Information Systems Operations 31 - Signal Operations 31 - Military Police 33 - Electronic Warfare/Intercept System Maintenance 37 - Psychological Ops 74 - Chemical 88 - Transportation 96 - Military Intelligence 98 - Signals Intelligence /Electronic Warfare Ops	27 - Paralegal 35 - Electronic Maintenance & Calibrations 38 - Civil Affairs (Reserve Component only) 42 - Adjutant General 44 - Financial Management 46 - Public Affairs 55 - Ammunition 56 - Religious Support 63 - Mechanical Maintenance 68 - Medical 71 - Administration 77 - Petroleum & Water 79 - Recruitment & Reenlistment 89 - Ammunition 91 - Medical 92 - Supply & Services 94 - Electronic Maintenance & Calibrations 97 – Bands

Branches of the Army's Warrant Officers

Combat Arms	Combat Support	Combat Service Support
13 - Field Artillery 14 - Air Defense Artillery 15 - Aviation 18 - Special Forces	21 - Corps of Engineers 25 - Signal Corps 31 - Military Police 35 - Military Intelligence	27 - Judge Advocate General's Corps 42 - Adjutant General's Corps 60 - Medical Corps 64 - Veterinary Corps 67 - Medical Service Corps 88 - Transportation Corps 89 - Ammunition 91 - Ordnance 92 - Quartermaster Corps 94 - Electronic Maintenance

Branches of the Army's Officers

Combat Arms	Combat Support	Combat Service Support
11 - Infantry 13 - Field Artillery 14 - Air Defense Artillery 15 - Aviation 18 - Special Forces 19 - Armor 21 - Corps of Engineers	25 - Signal Corps 31 - Military Police 35 - Military Intelligence 74 - Chemical	38 - Civil Affairs (RC) 42 - Adjutant General Corps 44 - Finance Corps 67 - Medical Service Corps 88 - Transportation Corps 89 - Ammunition 91 - Ordnance 92 - Quartermaster Corps Special Branches: 27 - Judge Advocate General's Corps 56 - Chaplain 60, 61, 62 - Medical Corps 63 - Dental Corps 64 - Veterinary Corps 65 - Army Medical Specialist Corps 66 - Army Nurse Corps

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Biography

Lindsay P. Cohn was born in Philadelphia, PA. She received her B.A. *magna cum laude* with distinction in Political Science from Duke University in 1999, and will receive her Ph.D. in Political Science from Duke University in 2007.

She is the author of the chapter on American civil-military relations in *Armed forces and international security: Global trends and issues*, edited by Jean Callaghan and Franz Kernic, co-author with Peter D. Feaver and Christopher Gelpi of "American Civil-Military Relations and the Use of Force" in the *Encyclopedia of War and American Society*, edited by Peter Karsten, and co-author with Peter D. Feaver and Richard H. Kohn of the introductory chapter of their edited volume *Soldiers and civilians: The civil-military gap and American national security*. She currently has an article entitled "Understanding civilian control: The essential issue of context" under revision for publication in *Armed Forces and Society*.

Her fellowships and grants include a Trans-Atlantic Post-Doctoral Fellowship in International Relations, Harvard University's Olin Institute for Strategic Studies Pre-Doctoral Fellowship, the Free University Berlin's Research Fellowship, the Alexander von Humboldt Foundation's German Federal Chancellor Fellowship, a grant in German Studies from the *Deutscher Akademischer Austauschdienst* (DAAD), and a Graduate Award for Research and Training from Duke University's Center for International Studies, among others.