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Monetary incentive systems for military personnel in the armed forces

– a survey of twelve countries

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Summary

It is universal in the armed forces that the military workforce and its human capital play a key role in the production of defense and military capabilities. A handful of unusual traits in the armed forces' personnel and human resources policies – e.g. the recruitment solely of young employees, the provision of military-specific education, the fostering of combat-oriented skills among its workforce, and the risk, hardship, and demands of military tasks – compel military organizations to use a battery of incentives designed to compensate and influence personnel behavior in the desired directions. Some monetary incentives increase the pool of potential recruits; some incentives induce retention and effort, while other incentives reward personnel for taking on high levels of risk or serving in low amenity locations.

In this report, we shed light on the monetary incentive systems in the armed forces and self-defense forces in NATO countries and NATO partner countries. The primary objective of this report is to understand how the ministries of defense, along with the armed forces, in a variety of advanced countries structure their compensation and personnel policies so as to meet the challenges of recruitment, retention, effort, and performance, as well as the separation of personnel.

The fundamental research question posed in this report is how the monetary incentive systems used in the armed forces in advanced countries are structured. More specifically, we study i) the uses and magnitudes of various compensation categories for military personnel, ii) the requirements for eligibility for the various monetary incentives, iii) the purposes of each monetary incentive, iv) whether the monetary incentives lead to satisfactory attainment of the purposes, and v) whether any of the monetary incentives have been reformed recently.

The report is based on a survey submitted as a Request for Information by the Norwegian Ministry of Defence to the respective ministries of defenses in each country in 2020. The ministry received answers from seven NATO countries, Denmark, Germany, Italy, the Netherlands, Poland, Spain, and the UK, in addition to four NATO partner countries, Australia, Finland, Japan, and Sweden. The report also assesses the compensation system in Norway. Thus, the report concerns the monetary incentive systems in twelve countries. This makes the report, to the best of our knowledge, the first analysis of a broad range of NATO members and NATO partner countries' monetary incentive systems.

Our findings show that these countries differ in how the monetary incentive systems are structured. In all the countries, base salary constitutes a central compensation category. Some countries place a strong emphasis on fixed supplements. In others, irregular supplements play a key role. One-time bonuses and deployment-related payments play small, but significant roles, in several monetary incentive systems. The coverage of commuting and housing expenses are important in countries with military bases in remote and sparsely populated areas. Tax exemptions, welfare services and payments, and the provision of civilian education do not play important roles in the incentive systems. In general, the ministries of defense report that they are satisfied with how the incentives work towards the attainment of the purposes of the incentives.

Sammendrag

I alle militære organisasjoner spiller arbeidsstyrken og dens humankapital en nøkkelrolle i produksjonen av forsvars- og militære kapabiliteter. En håndfull særegne trekk ved militære organisasjoners krav og HR-politikk – f.eks. kun rekruttering av ungt personell, utdanning av personellet internt i egne utdanningsinstitusjoner og promotering av stridsferdigheter i arbeidsstyrken, risikoen og belastningen i utførelsen av militære arbeidsoppgaver – fordrer at militære organisasjoner iverksetter økonomiske insentiver for kompensere og påvirke personellens atferd i ønsket retning. Noen økonomiske insentiver øker antallet potensielle rekrutter; noen insentiver stimulerer beholdelse av personell og innsats, mens andre insentiver belønner personellet for høy risiko eller tjeneste på mindre bekvemmelige steder.

I denne rapporten studerer vi monetære insentivsystemer i militære organisasjoner i Natoland og alliansens partnerland. Hovedformålet med rapporten er å forstå hvordan forsvarsdepartementer strukturerer kompensasjons- og personellpolitikken for å møte utfordringer med rekruttering, retensjon, innsats og prestasjon samt avvikling av personell.

Forskningsspørsmålet som ligger til grunn for rapporten er hvordan monetære insentivsystemer i militære organisasjoner er strukturert. Mer spesifikt studerer vi i) bruken av og størrelsen på forskjellige kompensasjonskategorier til militært personell, ii) kravene for å kunne motta ulike monetære insentiver, iii) formålene til hvert av insentivene, iv) hvorvidt de monetære insentivene leder til en tilfredsstillende oppnåelse av formålene eller ikke og v) hvorvidt de monetære insentivene nylig er reformert eller ikke.

Rapporten er basert på en spørreundersøkelse. Den ble sendt som en Request for Information (RFI) av det norske forsvarsdepartementet (FD) til de respektive forsvarsdepartementene i hvert land i 2020. FD mottok svar fra syv Natoland: Danmark, Tyskland, Italia, Nederland, Polen, Spania og Storbritannia. I tillegg svarte fire partnerland til alliansen: Australia, Finland, Japan og Sverige. Rapporten undersøker også kompensasjonssystemet i Norge. Den handler derfor om de monetære insentivsystemene i tolv land. Rapporten er nok den første analysen av insentiver i et bredt utvalg Natoland og Natopartnerland.

Funnene våre viser at landenes monetære insentivsystemer minner om hverandre, men allikevel er nokså ulikt strukturert. I alle land utgjør grunnlønn en sentral kompensasjonskategori. Noen land legger stor vekt på faste tillegg. I andre land spiller variable tillegg en stor rolle. Bonusordninger og tillegg til utenlandsdeployert personell utgjør små, men signifikante roller i flere monetære insentivsystemer. Dekning av kostnader knyttet til pendling og bolig er viktig i land med en basestruktur som delvis er distribuert i grigrendte strøk med sparsom befolkning. Skattelettelser, velferdsgoder og dekning av sivile utdanninger spiller ikke viktige roller i insentivsystemene. Generelt er forsvarsdepartementene tilfreds med hvordan de monetære insentivene fungerer for å oppnå formålene med insentivene.

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Preface

We would like to thank the Norwegian Ministry of Defence for the task of designing the survey, analyzing the replies and writing this report. As a group of defense economists studying compensation and personnel policies in the Norwegian defense sector, we are grateful for the opportunity to learn more about compensation and personnel policies in the armed forces in NATO countries and NATO partner countries.

We want to stress explicitly that the monetary incentive system in place in the armed forces and self-defense forces is rather complex and difficult to assess at the level of abstraction achieved in this report. We know a great deal about the Norwegian system and we have attempted to write correctly about the other eleven systems. Any errors are, of course, our responsibility, but we acknowledge that there may be misunderstandings in this report. To improve the accuracy of the report, all countries received a draft of their respective country analysis and Chapter 3 for proof reading. Five countries provided feedback on the drafts. We thank Denmark, Germany, Finland, Italy, and Japan for the additional effort. Finally, so as not to miss an opportunity to praise best practices, we want to compliment the Australian Department of Defence and the Australian Defence Forces for having, by far, the most transparent and well-described monetary incentive system in place online.

The project began June 2020. The survey was submitted to the various countries in November 2020. Several of the countries responded after a few weeks. Others spent more time. The long response time created some manpower issues on our side. The bulk of the analysis and report writing took place fall of 2022. A first draft of the report was finished November 1, 2022. We sent the report draft to the participating countries for their consideration after the first draft was ready.

A great thanks are due to Ane Ofstad Presterud for providing research support. Thanks are also due to our former colleague Ola Halvorsen for his effort in supporting the analysis of the survey responses.

Kjeller, 15 February 2023

Petter Y. Lindgren and Iris Eva Einarsdottir



1 Introduction

1.1 Background

NATO countries typically spend between 1 to 3 percent of the gross domestic product (GDP) on defense purposes. These countries' defense ministries and the armed forces, therefore, typically command billion-dollar budgets; manage massive real capital in the form of weapon systems, equipment and military bases; and are among the largest employers in the national economies. The fraction of the budget spent on personnel varies substantially among NATO countries, ranging from 28 percent in Bulgaria to 76 percent in Greece in 2019 (Matthijs 2020). Despite an inclination in the defense and security establishments to focus on high-tech weapon systems, it is universal that the defense labor force and its human capital play a key role in the production of defense and military capabilities (Donnelly 2004).

The armed forces¹ share several peculiar traits that together make military organizations unique in a national context. They are large, hierarchical organizations that are split into several branches with each having responsibility for one domain of warfare and defense. The armed forces hire predominantly young recruits, who are expected to remain in the military for a long time, with very little lateral mid-career recruitments into military positions (Asch and Warner 2001). This means that the armed forces are hiring future colonels and generals today. The armed forces also educate military personnel in internal military schools and colleges. Military work is often more risky than civilian work and may require long and exhausting periods of training, exercises, and sailing. Another trait of the armed forces is that they induce a high degree of rotation among employees, between geographical locations, departments and divisions, and work tasks (Hanson 2019).

This unique combination of traits encourages the armed forces to offer military compensation packages to their military personnel, both to compensate for their work and to achieve a number of human resources (HR) objectives (Asch 2019). The top HR objectives of the armed forces include attracting high-quality recruits, retaining qualified and competent personnel, motivating their personnel to put in effort and invest in human capital, as well as providing for the efficient separation of personnel from the service. These objectives are, of course, not distinct to the armed forces. Combined with the unique institutional setup and personnel requirements of military organizations, however, the armed forces must put in place military pay and financial incentives that responds to the HR objectives (Asch, Hosek, and Warner 2007; Asch and Warner 2001; Simon and Warner 2010). The structure of compensation and personnel policies in the armed forces may therefore deviate substantially from the standards in the civilian sector.

Most armed forces have a battery of incentives designed to influence personnel behavior in the desired directions. Some monetary incentives increase the pool of potential recruits; some incentives induce retention and effort, while other incentives reward personnel for taking on high

¹ Note that, for simplicity, we include the Japanese Self-Defense Forces (JSDF) when we refer to armed forces in general.

levels of risk or service in low-amenity locations. The national context, e.g. national labor markets, industrial and labor organization, and the geographical location of the military base structure, may generate different monetary incentive systems across countries. However, the armed forces across countries may share similarities in the structure of compensation and personnel policies given that they all share to a greater or lesser degree the unique combination of traits discussed above.

The Norwegian Ministry of Defence (NMOD) is currently reviewing its monetary incentive system. An analysis of how other ministries of defense and armed forces structure their compensation and personnel policies is helpful into supporting the design of an improved monetary incentive system. To this end, the NMOD submitted a Request for Information (RFI) to many NATO countries as well, as four NATO partner countries, concerning the monetary incentive systems in use.

In this report, we assess the monetary incentive systems in the armed forces in advanced economies based on the RFI answers provided by recipient countries. The NMOD received answers from seven NATO countries, Denmark, Germany, Italy, the Netherlands, Poland, Spain, and the UK, in addition to four global NATO partners, Australia, Finland, Japan, and Sweden. The report also assesses the compensation system in Norway. Thus, the report concerns the monetary incentive systems in twelve countries. This makes the report, to the best of our knowledge, the first analysis of a broad range of NATO and NATO partner countries' monetary incentive systems.

1.2 Research objective and questions

The primary objective of this report is to understand how the ministries of defense (MODs) and the armed forces in a variety of advanced countries structure their compensation and personnel policies so as to meet the challenges of recruitment, retention, effort and performance as well as the separation of personnel from the service.

The fundamental research question is as follows: how are the monetary incentive systems in the armed forces in advanced countries structured? In the assessment of the monetary incentive systems in the studied countries, we operate more specifically using seven sub-questions:

1. What is the distribution of personnel expenditures in the armed forces?
2. What are the requirements to be eligible to receive the various monetary incentives?
3. How many incentives constitute the compensation categories?
4. Are the monetary incentive systems complex?
5. What are the purposes of each monetary incentive?
6. Do the monetary incentives work?

7. Have there been any reforms of the main incentives recently?

The five questions delves into various aspects of the monetary incentive systems in place in the twelve countries. Research Question (1) asks how different compensation categories are used in the armed forces. Military organizations differ in how much they spend on the various potential compensation categories. For example, some armed forces spend a great deal on incentives to increase geographical mobility while others emphasize such mobility less in their monetary incentive systems. Research Question (2) concerns eligibility for the monetary incentive schemes. Monetary incentives often require specific conditions (e.g., continuous employment in a specified period or being a member of a specific profession, such as pilot, engineer, or medical personnel). Research Question (3) asks how many incentives there are per compensation category. The existence of a large number of incentives may indicate the importance of the compensation category, but this may also be the result of a national context in which there are usually many different incentives in place more generally. Thus, we continue by asking Research Question (4), which is concerned with the complexity of the compensation category systems. A complex system may indicate importance, but it may also indicate an inability to streamline the system and thus make it simple to understand for personnel and easy to use for administrators. Taken together, the number of incentives and the complexity of a given compensation category system provide insight into how incentives are structured. Research Question (5) asks what the purposes of the monetary incentives are. The most important purposes on the part of the monetary incentive systems in the armed forces are to improve recruitment, increase retention rates, induce effort, provide for a satisfactory separation for personnel, incentivize deployment abroad, and improve geographical mobility. Research Question (6) deals with whether the monetary incentives contribute to the attainment of their purposes. When dealing with the assessment of attainment, one should also keep in mind the efficiency in the spending. Money spent on one incentive could be re-oriented towards a different incentive, one that might have a higher return, at least in HR terms. Research Question (7) concerns whether the monetary incentives in place in the various countries have been reformed. A recent reform indicates that there have been attempts to improve the efficiency of these monetary incentives.

To emphasize how compensation and personnel policies are structured to incentivize certain behavior among personnel, this report breaks down the total compensation package for military employees into ten compensation categories: base salary, fixed supplements, irregular supplements, one-time bonus payments, deployment-related payments, pension earnings, tax exemptions, welfare services and payments, coverage of commuting and housing expenses, and the provision of civilian education. This allows a fine-grained analysis of the composition of compensation and the objectives of each compensation category for the various countries analyzed.

1.3 Organization of the report

In Chapter 2, we present the survey, the RFI, and the questions submitted to the respondents in the countries' MODs. The chapter presents the survey process (Section 2.1), limitations (Section 2.2), general questions (Section 2.3), the compensation categories (Section 2.4), questions

concerning the top three incentives per compensation category (Section 2.5) and exchange rates (Section 2.6). In Chapter 3, we compare the countries' monetary incentive systems. In Chapter 4, we present each country's monetary incentive system. In Chapter 5, we discuss the way forward.

The report can be read in its totality. Readers primarily interested in the comparison of the countries' monetary incentive systems, can skip directly to Chapter 3. Readers who are interested in a more in-depth treatment of the countries, or a subset of the countries, are recommended to find each country analysis in Chapter 4. We have also provided an executive summary at the beginning of each country analysis.

2 The survey

In this chapter, we present the RFI survey submitted to the MODs. The chapter has six sections. First, we discuss the survey process (Section 2.1) and the limitations of the study (Section 2.2). The survey includes general information questions regarding the defense budget and the personnel structure in the armed forces. In Section 2.3, we present these general information questions. The survey divides the total military compensation package into ten potential compensation categories and asks similar questions regarding each of these compensation categories. In Section 2.4, we present these ten compensation categories. The survey also asks questions about the top three incentives per compensation category. In Section 2.5, we present these questions. Finally, we present the exchange rates used for Australia, Denmark, Japan, Norway, Poland, Sweden and the United Kingdom in Section 2.6. The other countries use euro.

2.1 Survey process

The report is based on a survey submitted as an RFI by the NMOD to the respective ministries of defenses in each country in 2020. The NMOD used their military attachés in the respective countries to make contact and convey the survey to the MODs. The Norwegian Defence Research Establishment (FFI) had the survey translated to Japanese to accommodate the needs of the Japanese Ministry of Defence (JMOD).

The countries' MODs submitted their answers to the survey to the NMOD, and then, the NMOD sent these answers to the FFI. The report also uses additional information submitted by the countries' MODs to the NMOD and the FFI. Most of the countries replied in 2021, while a few countries replied in 2022.

The authors at the FFI have been responsible for the design of the survey, analyzing the country responses, and writing the report.

All the MODs received a draft of the description of their own country in Chapter 3, as well as a draft of the overview and benchmarking in Chapter 4, to provide the MODs with the ability to check our analysis for quality and add or subtract information. Around half of the MODs came back to us with information and remarks: Denmark, Finland, Germany, Italy, and Japan.

2.2 Limitations

An analysis of the monetary incentive system in the armed forces requires a great deal of information. When designing the survey, we knew it was important to receive answers from as many countries as possible. Thus, there was a trade-off between the number and depth of the questions on the one hand and the likelihood of receiving answers from the countries' MODs on the other hand. More complex and in-depth questions improve our ability to understand and analyze how the monetary incentive system works. However, complex and in-depth questions could have deterred the various MODs from answering, either because of time and cost constraints or confidentiality issues or both. Therefore, we designed a survey that was as simple as possible given the difficult and complex issues we seek to understand.

To reduce the complexity of the survey, many of the questions on the incentive structure concern only the top three incentives in terms of total expenditure per compensation category. This ensures that the most important incentives are included in the analysis. However, this limits the survey's coverage of the monetary incentive systems in place in the armed forces.

The answers from the countries' MODs vary considerably in terms of the quantitative data provided and the qualitative information and judgments concerning the monetary incentive systems. We are completely reliant on the answers from the MODs, as we do not possess the capacity or the resources to investigate each of the countries' compensation and personnel policies on our own. It is important to state that the assessments provided in this report are limited by the answers we have received from the various countries' MODs.

We do not attempt to explain the similarities or diversity of the incentive structures in the armed forces across the twelve countries we study in this report. Prior to receiving answers from the MODs, we expected both similarities and differences between the monetary incentive systems across the twelve advanced economies we study. We expected similarities due to the institutional peculiarities of military organizations and the personnel practices of hiring young recruits, providing military education inside the organization, and not engaging in lateral recruitment. On the other hand, the MODs and the armed forces may be required to adjust their monetary incentive system to national conditions such as the labor market, wage setting practices, and business cycles. If such conditions differ substantially across nations, we would expect more diversity in terms of how the MODs and armed forces structure compensation and personnel policies.

2.3 General information

The survey includes questions regarding general information about the defense budget, the personnel structure, and deployment abroad. General-information questions are focused on the macro level and designated with the letter A. Questions concerning the various compensation categories are marked with the letter C. These are presented in Sections 2.4 and 2.5. General information questions –A-type– include not only full-time military employees, but also other types of employees, e.g. civilians, conscripts, and reservists. By contrast, C-type questions concern military employees only.

The survey asks two questions about the personnel structure in the armed forces. These are:

A1a) What are the numbers of personnel in the Armed Forces, by age group and employment type?

A1b) What is the distribution of military personnel among the branches of the Armed Forces?

The survey then proceeds by asking about personnel expenditures as a share of total expenses and the distribution of personnel expenditures among the ten compensation categories outlined in the survey:

A2a) How much is spent on monetary incentives for military personnel as a share of total expenses on the Armed Forces?

A2b) What is the distribution of total personnel expenditures on the compensation categories?

If numbers or percentages are difficult to obtain, the countries can provide a qualitative assessment of the distribution of total personnel expenditures on compensation categories. The qualitative assessment is characterized as follows: 75 percent+ is “very large”, 50-75 percent is “large”, 25-50 percent is “medium”, 10-25 percent is “moderate”, 1-10 percent is “small”, <1 percent is “negligible”, and 0 percent is “non-existent”.

We also ask about the payment and compensation schemes for reservists (question A2c).

The survey also includes questions on military personnel deployed abroad:

A3a) What is the share of the country’s military personnel deployed in foreign countries?

A3b) What is the share of the country’s military personnel deployed in foreign countries by type of deployment (peacetime establishment/crisis establishment)?

These general-information questions are considered simple to answer for the various MODs because they require little in-depth data and understanding of the monetary incentive system in place.

2.4 Compensation categories

The compensation and personnel policies in place may have various purposes, such as improving the recruitment of personnel, generating higher retention rates, inducing more effort and performance, providing for the satisfactory completion of employees' careers, and incentivizing geographical mobility or deployment abroad.

To understand a country's compensation and personnel policies for its armed forces, it is necessary to split the total military compensation package into meaningful compensation categories.

The survey operates using ten compensation categories:

1. Base salary
2. Fixed supplements
3. Irregular supplements
4. One-time bonus
5. Deployment-related payments
6. Pension earnings
7. Tax exemptions
8. Welfare services and payments
9. Coverage of commuting and housing expenses
10. Civilian education

The compensation categories are defined in the following ten sections:

2.4.1 Base salary

Base salary or basic pay (compensation category 1) is the fundamental component of most compensation policies. Base salary is set as an hourly rate, or monthly salary. The base salary usually represents the minimum amount an employee can expect to receive after a specified pay period. All military employees receive base salary, although the pay level depends on, for example

the employees' occupations, grades, experience, and competencies. Base salary is the largest compensation for most military personnel.

2.4.2 Fixed supplements

Fixed supplements (compensation category 2) are in this survey defined as regular compensations linked to personal characteristics, abilities, responsibilities, environmental conditions endured, or activities and tasks undertaken. Examples of fixed supplements are allowances for specific occupations, leadership positions, dangerous positions, and families and children. Fixed supplements generally do not vary between paychecks and employees usually know the size of the compensation months in advance. Fixed supplements do not include supplements provided for deployment abroad.

2.4.3 Irregular supplements

Irregular supplements (compensation category 3) are compensation paid as temporary additions to the base salary. Irregular supplements are forms of compensations that are linked to a position or profession, workload, working hours, or place of work with variable payouts. In this survey, irregular supplements are defined as forms of compensations for which the employee cannot know the exact size of future payments without knowing the exact activities, workhours, and workload undertaken. As a rule of thumb, a supplement is irregular if an employee does not know the value of the next month's pay, as the size of the compensations varies from paycheck to paycheck. Examples of irregular supplements include shift supplements; exercise and training payments; overtime pay; and additional pay for evening, weekend, or holiday work.

2.4.4 One-time bonus payments

One-time bonus payments (compensation category 4) concern one-time compensation in the form of a bonus. Examples of one-time bonuses are sign-on bonuses, retention payments, and fulfillment bonuses. These one-time payouts can be given to military personnel in specific occupations that are in high demand in the civilian sector (e.g., doctors and engineers) or use in the recruitment of personnel with expensive educational backgrounds (e.g., pilots). Some one-time bonuses are paid to personnel who stay in the armed forces for a specified period.

2.4.5 Deployment-related payments

Deployment-related payments (compensation category 5) concern compensation schemes specifically targeted towards military personnel deployed abroad. Deployment abroad (i.e., in foreign territory outside the borders of the armed forces' home country) often triggers additional monetary allowances. These monetary allowances are most often categorized within the categories of fixed supplements, welfare services and payments, and commuting and housing allowances. The special characteristic of deployment-related payments is that they are confined to personnel serving abroad.

NATO countries can deploy military personnel to *Peacetime Establishment* and *Crisis Establishment*. Peacetime Establishment refers to deployment in the NATO command structure, other NATO installations, and diplomatic work, while Crisis Establishment refers to international operations. NATO's Kosovo Force (KFOR, 1999–) and International Security Assistance Force (ISAF, 2001–2014) are examples of Crisis Establishment deployments of military personnel from NATO countries. Monetary allowances related to both Peacetime Establishment and Crisis Establishment deployment are included in this report.

2.4.6 Pension earnings

Pension earnings (compensation category 6) play a key role in most military compensation and personnel policies because the armed forces require a sufficiently large fraction of its personnel to be “young and vital” (Hanson and Lindgren 2021; Rosen 1992; Warner 2006). Thus, they must have monetary mechanisms for separating personnel from the military “gracefully when it is in the best interest of the service to do so” (Asch 2019: ix). This compensation category concerns contributions to the employees' future pension benefits. We are interested only in specific military pension earnings, beyond what is universal among citizens or standard for public- or private-sector employees.

If the military personnel receive exactly what other comparable occupations in the public or private sector receive, then the value of this compensation category is zero. Usually, military personnel retire earlier than the standard retirement age and are compensated accordingly. The monetary value of such an early retirement system may, however, be difficult to estimate.

2.4.7 Tax exemptions

Tax exemptions (compensation category 7) can be used as a monetary incentive for recruitment and retention in the armed forces. Examples of such exemptions can include lower income tax for military personnel, the suspension of property taxes for property owned by military personnel, and tax exemptions for specific allowances to military personnel. Military personnel may also face lower tax rates when deployed abroad. Tax exemptions are not normally part of the budgets of MODs. The value of tax exemptions must thus need to be imputed.

2.4.8 Welfare services and payments

Welfare services and payments (compensation category 8) may be provided to military employees in the armed forces. To investigate a specific incentive for recruitment and retention in the armed forces, we emphasize provisions of welfare services and payments that are paid for by the MODs and armed forces and do not consider universal welfare services and payments provided by governments to all citizens. For instance, in Scandinavia, all citizens receive health care and child-care services for free or at very subsidized prices (Aaberge, Langørgen, and Lindgren 2017, 2018, 2021, 2022). Therefore, the NMOD has small expenses in terms of welfare services and payments. We also focus on welfare services and payments that exceed what other ordinary public- and private-sector employees receive. Examples of welfare services and payments include health care

insurance for the employee and the family, dental insurance coverage, free or subsidized child-care, paid sick leave, and paid parental leave.

2.4.9 Coverage of commuting and housing expenses

The coverage of commuting and housing expenses (compensation category 9) is a compensation category that is in use in many military organizations. The reason for this is the armed forces' need for geographical mobility among employees. This compensation category concerns the coverage of transportation, commuting, moving, and housing expenses. Examples of this compensation category include the provision of free or subsidized housing, the coverage of commuting expenses, and payment for moving to a new location/base.

2.4.10 Provision of civilian education

Military organizations often provide education to their military personnel in military schools and colleges. They also can provide civilian education (compensation category 10), either in-kind or as a cash benefit, as an incentive to retain military personnel for a specific time period, support personnel in resettling into civilian life, and/or make the armed forces more attractive for recruitment purposes. Civilian educational institutions include colleges, universities, and vocational schools. This compensation category includes tuition payment or assistance, financial support during education; scholarships for living, food, books, and other supplies; and loan repayment schemes. We focus on expenses financed by the MODs and armed forces, not expenses that are universally available to citizens.

2.4.11 Survey questions on the compensation categories

The survey asks two general questions for each of the nine compensation categories other than base salary. First, the survey asks the following:

CXa) What is the average coverage of [compensation category X] by age group and employment type?

where X is the numbers 2–10 and the content inside [...] is the vector of the nine compensation categories, except base salary, described in this section. Preferably, the MODs presented numbers for the various age groups and employment types. The age groups are defined in the survey as 15–22 years old, 23–25 years old, 26–28 years old, 29–31 years old, 32–34 years old, 35–44 years old, 45–54 years old, 55–64 years old, and 65 years and older. By employment type, the survey refers to officers and other ranks, which are taken from NATO terminology. The other ranks employment type is similar to the “naval rating” (Royal Navy, UK) and “Warrant Officer & Enlisted” (Japan) as well as enlisted in Australia.

Then, the survey asks the following:

CXb) How many schemes for [compensation category X] exist?

CXc) Is the [compensation category X] system considered complex?

where X is the numbers 2–10 and the content inside [...] is the vector of the nine compensation categories, except base salary, described in this section. The MODs fill in the number of schemes per compensation category and respond regarding how complex the system for each compensation category is by choosing between the following alternatives: “Very complex”, “Complex,” “Not very complex,” “Simple,” and “No answer.”

2.5 Top three incentives per compensation category

To focus on the most important incentives in place for each compensation category, the survey continues by asking for information and asking questions about the top three incentives per compensation category, as defined by total expenditure. First, the survey asks the MODs to respond to the following:

CXd) Name the top three [compensation category X].

Then, the survey asks for a description of the top three incentives for each compensation category:

CXe) Describe the top three [compensation category X].

The respondents are asked to describe the requirements for receiving the incentives in a Word file. X is the numbers 2–10 and the content inside [...] is the vector of the nine compensation categories, except base salary, described in Section 2.4.

The survey follows up with a question on the purposes of the incentives:

CXf) What are the purposes of each of the top three [compensation category X]?

where X is the numbers 2–10 and the content inside [...] is the vector of the nine compensation categories, except base salary, described in Section 2.4. The respondents are provided with five pre-filled alternatives for the purpose of each of the top three incentives: 1) improve recruitment, 2) increase retention rates, 3) induce more effort, 4) provide for the satisfactory completion of employees’ careers, and 5) incentivize deployment abroad. The respondents can also list other purposes.

The respondents are then asked to assess the ability of the incentives to fulfill the purposes:

CXg) Are the top 3 [compensation category X] satisfactory in terms of achieving the purposes?

The survey provides five alternative answers: “High satisfaction,” “Satisfactory,” “Low satisfaction,” “Not satisfactory,” and “No answer.”

Finally, the respondents are asked about reforms of the incentives:

CXh) Have the top 3 [compensation category X] been reformed in the past 5 years?

The respondents can choose between “Yes” and “No.”

2.6 Exchange rates

In this report, we present all monetary values in Euros. The monetary values are thus comparable across countries with different currencies. This also eases the reading process for readers who are not familiar with all the national currencies.

There are seven national currencies other than the euro at play in this report. These are the Australian dollar (AUD), Danish kroner (DKK), Japanese yen (JPY), Norwegian kroner (NOK), Polish złoty (PLN), Swedish kroner (SEK), and Pound sterling (GBP). The currency rates used in this report are shown in Table 2.1. Finland, Germany, Italy, the Netherlands, and Spain use the euro. The exchange rates used are the average from 01/01/2020 to 31/12/2020 and were obtained from the European Central Bank. We use a euro/JPY rate provided by the Japanese Ministry of Defence that differs slightly from the average during the period stated above.

Table 2.1 *Exchange rates vis-à-vis the euro for national currencies.*

National currency	Euro
1 AUD	0.6048
1 JPY	0.0076
1 DKK	0.1342
1 PLN	0.2252
1 SEK	0.0954
1 NOK	0.0934
1 GBP	1.1248

Source: European Central Bank, Japanese Ministry of Defence.

3 Overview and benchmarking

In this chapter, we assemble the information provided by the countries' ministries of defense to obtain a better overview of the magnitudes of the countries' emphasis on the defense- and personnel expenditures, as well as the various compensation categories. A comparison of the defense budgets is found in Section 3.1, and the personnel situation is displayed in Section 3.2. We compare the total compensation in Section 3.3 and pay specific attention to base salary, fixed supplements, irregular supplements, one-time bonuses, and the coverage of commuting and housing expenses in Section 3.4, 3.5, 3.6, 3.7, and 3.8, respectively. We received sufficient answers from the countries surveyed regarding these compensation categories, and they play an important role in each country's monetary incentive system. We have omitted a comparison of deployment-related payments, pension earnings, tax exemptions, welfare services and payments, and civilian education because of a lack of data and the fact that these compensation categories play a less significant role in the total compensation package in the armed forces that are studied in this report. We end the chapter with a section that summarizes the monetary incentive systems in all twelve countries in Section 3.9.

In the comparison of the countries' monetary systems, it is important to remember that the countries may provide different kinds of data for the same questions. In general, it is difficult to compare countries' information on spending and personnel. We do not have detailed information regarding what has been included in the numbers for spending and personnel. Some countries may have included all relevant defense institutions, while others have organized the defense sector as several entities, including the armed forces. In Norway, for instance, the institutions with the responsibility for defense real estate, the procurement of equipment, and research, are organized outside the armed forces. The responsible institutions are not part of the figures and data submitted to us. Some countries include the Coast Guard in the armed forces, while others have organized it under civilian ministries.

More specifically, here, we list differences that were announced by the countries when delivering the survey response. Australia provides numbers for permanent forces over the 2019–2020 fiscal year, including only military personnel who had served the entire year. We do not know whether the numbers provided are per employee or per recipient for the various compensation categories. Denmark provides numbers per recipient for all employees, not just full-time workers. Finland provides total numbers per age group, which we divide by the numbers of employees in order to obtain average numbers per employee. Finland is not included in the age-specific comparisons, because they reported data using other age groups. Germany did not provide quantitative data. Italy reports the total spending by compensation categories. Italy is not included in the age-specific comparisons because they reported data using other age groups. Japan reports figures for base salary and one-time bonuses that all employees receive. The Netherlands reports average annual values for each age group, but we do not know whether they are per employee or per recipient. Norway provides average values per recipient in a full-time position. Part-time workers or workers who had not worked the entire year are not included. Poland did not split its data into age categories. Spain did not provide quantitative data. Sweden reports the number per employee. All employees are included, including those not in the service. The United Kingdom did not

provide quantitative data. This is the reason that not all countries are included in the comparison, and it is important to remember that the countries included may have provided different data.

3.1 Defense- and personnel expenditures

A standard way of comparing countries' spending for defense purposes is to present defense spending as a share of GDP. The countries studied in this report differ in their spending when it is measured in this way. In Figure 3.1, the defense expenditures as a share of the GDP in 2020 are shown. Note that the countries' methods of calculating their defense expenditures may differ. Also, note that for several countries, defense expenditures have increased since 2020. The COVID pandemic also affected the 2020 GDP numbers, making them perhaps less representative than those for other years. We still use the 2020 numbers because the countries studied reported numbers for 2020 in the RFI.

The United Kingdom has the largest defense expenditures in relative terms – as a share of the GDP – at 2.3 percent of GDP. Poland also has expenditures higher than 2 percent of the GDP. Australia and Norway spent 2 percent of GDP in 2020. Italy, Finland, and Germany have a spending between 1.5 and 1.6 percent of GDP, while the Netherlands, Denmark, Japan, and Sweden spent between 1.0 and 1.5 percent of GDP. Spain spent around 1.0 percent of GDP in 2020.

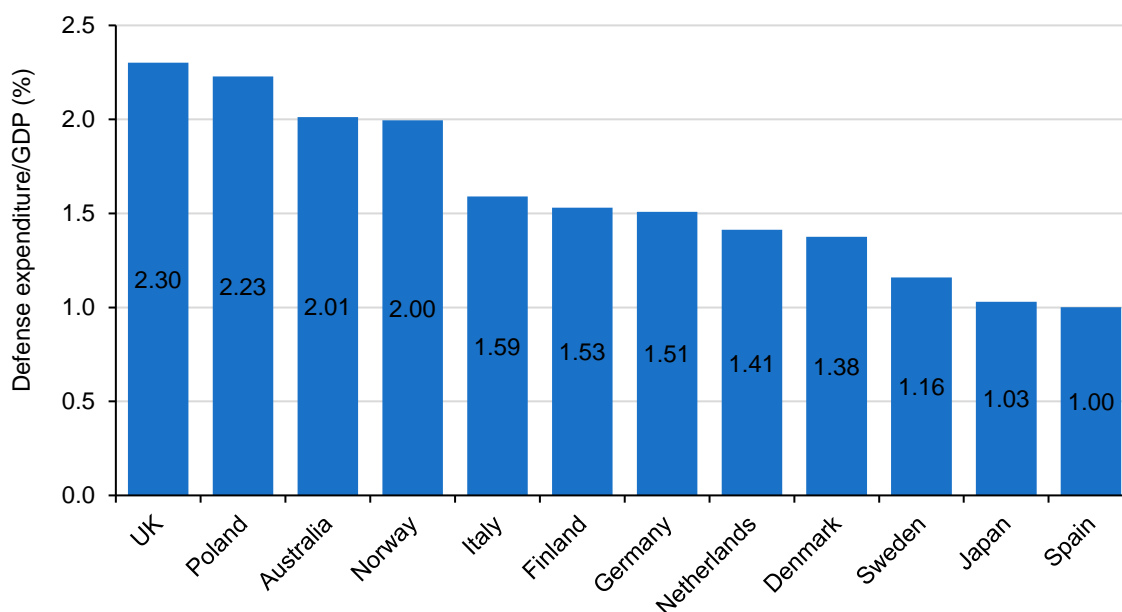


Figure 3.1 Defense expenditures as a share of GDP in 2020 for all twelve countries, in percent. Source: NATO for NATO members and World Bank (SIPRI) for NATO partner countries.

Figure 3.2 shows the countries' spending on personnel in defense expenditures. The countries differ significantly in the share of personnel costs of the total defense expenditures. Italy and

Spain spend between 60 and 70 percent of defense expenditures on personnel. The Netherlands, Denmark, Poland, Germany, and Japan spend between 40 and 50 percent of the defense expenditures on personnel. Sweden, Norway, the UK, and Australia spend between 30 and 40 percent, while Finland spends less than 30 percent on personnel. Note that for Finland, all value added taxes are included in the ‘Other expenses’ category, potentially underestimating the personnel expenditures.

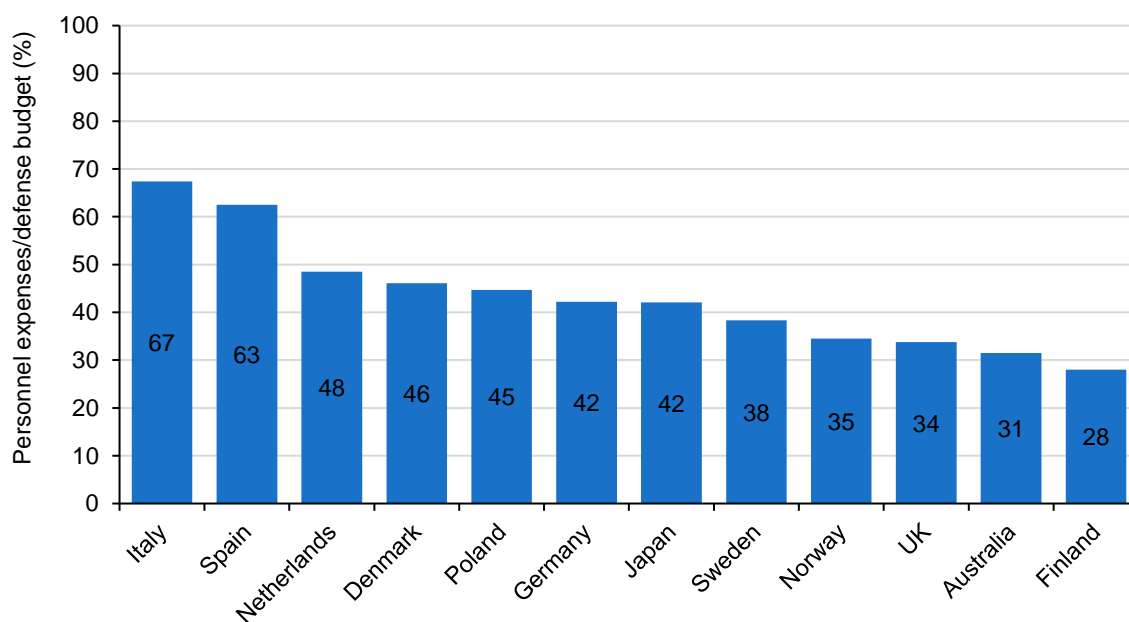


Figure 3.2 Personnel expenditures as shares of the total defense expenditures for all twelve countries, in percent. Source: NATO for NATO members and the ministries of defense for NATO partner countries.

The variation in personnel costs as a share of the total defense expenditures is found among other NATO countries as well. Figure 3.3 shows personnel expenditures as a share of the total defense expenditures in all NATO countries, as well as NATO partner countries, Australia, Finland, Japan, and Sweden. The highest share of personnel expenditures in 2020 is found in Croatia, Greece, Portugal, and Slovenia, where the share was over 70 percent. The smallest share of personnel expenditures was in the Hungarian defense expenditures, where these costs constituted only 27 percent of total expenditures.

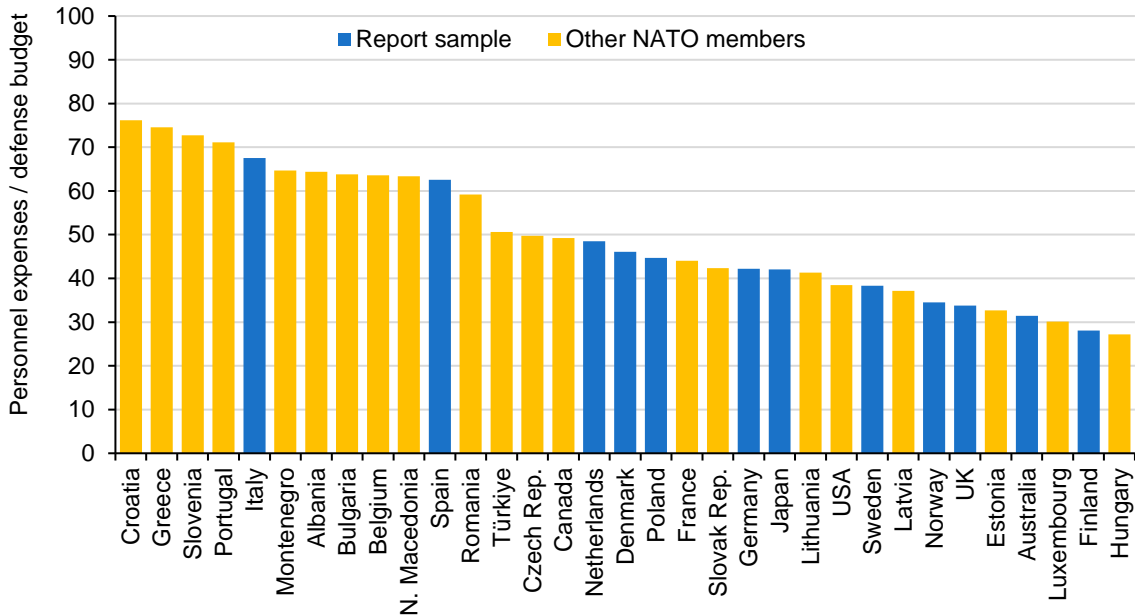


Figure 3.3 Personnel expenses as a share of total defense expenditures for all NATO countries and Australia, Finland, Japan, and Sweden. Countries in the report’s sample are in blue and other NATO members are in orange. Source: NATO and the ministries of defense for non-NATO members.

3.2 Personnel situation

The demography of the armed forces differs across the sample we study in this report. In Figure 3.4, we have summed up the share of personnel (officers and other ranks/enlisted) in three age groups: less than 35 years old, 35–44 years old, and 45 years and older. The countries are ranked by the share of personnel under 35 years old. Finland, Germany, the UK, Australia, Norway, Sweden, and the Netherlands have an age structure in which over 50 percent of the military personnel – officers and other ranks/enlisted – are under 35 years old. Italy, Poland, and Spain have the oldest age structures, with the age group under 35 years old representing less than 30 percent of the total military personnel. Conscripts are not included in these numbers.

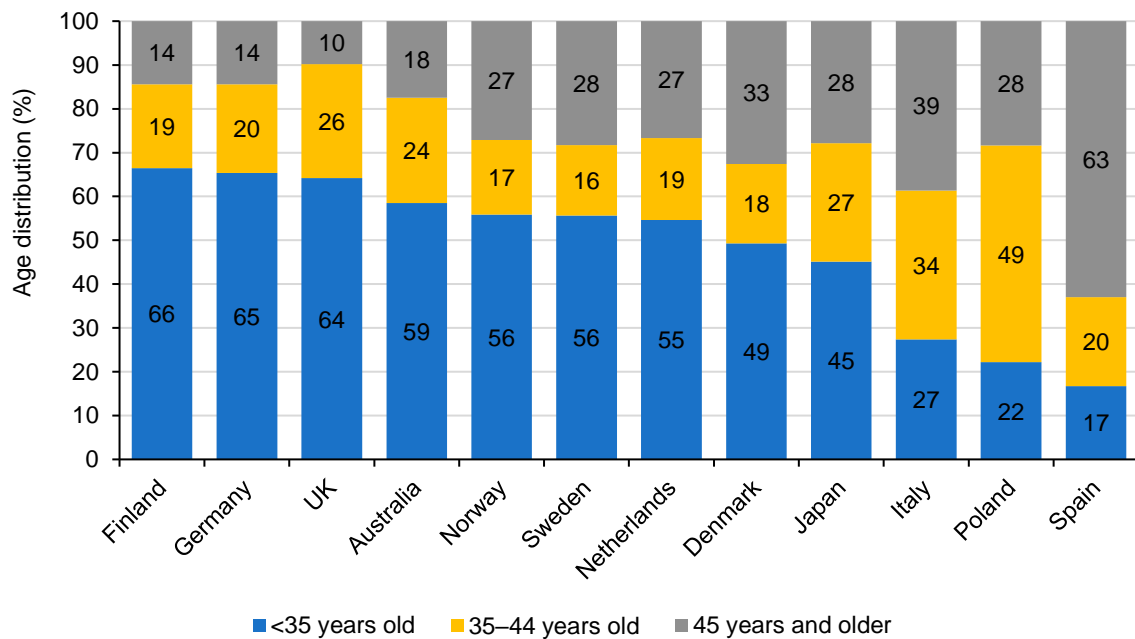


Figure 3.4 Age structure in the armed forces for military personnel (officers and other ranks/enlisted) for all twelve countries, three age groups, in percent. Source: National ministries of defense. For the UK, see <https://www.gov.uk/government/statistics/uk-armed-forces-biannual-diversity-statistics-2020>. Note: The countries are ranked by the share of age group <35 years old.

Figure 3.5 and Figure 3.6 show the distribution of officers and other ranks/enlisted, respectively, by branch and other departments in the armed forces for all countries except the United Kingdom. Most countries have the largest number of military personnel employed in the Army. Some countries have a relatively large Home Guard. Note that in Italy the Home Guard is a dual-hatted military and civilian police force. In Denmark, the number of personnel in the Home Guard is removed from the figures because they include volunteers. Finland, the Netherlands, Norway, Poland, and Sweden have a substantial share of personnel in the Other category. Note that it is difficult to compare countries' information on personnel because we do not have sufficiently detailed information in this regard.

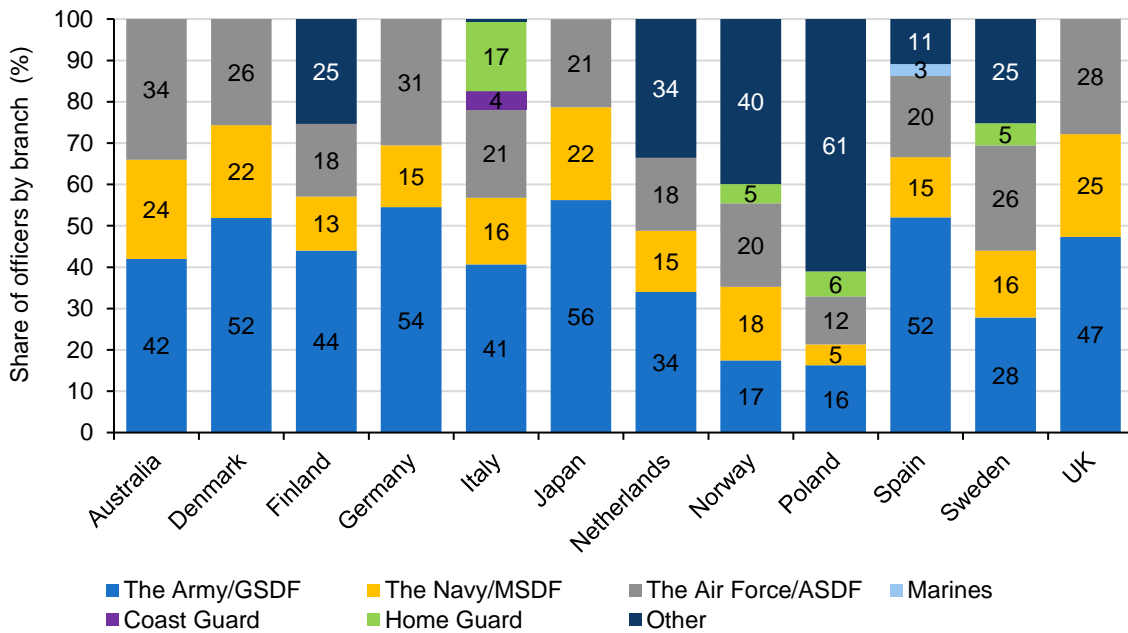


Figure 3.5 Distribution of officers by branch and institution for all twelve countries, in percent. Source: National ministries of defense. For the UK, see <https://www.gov.uk/government/statistics/uk-armed-forces-biannual-diversity-statistics-2020>. Note: Defense institutions that account for less than 3 percent of the total personnel expenditures are not numbered in the figure.

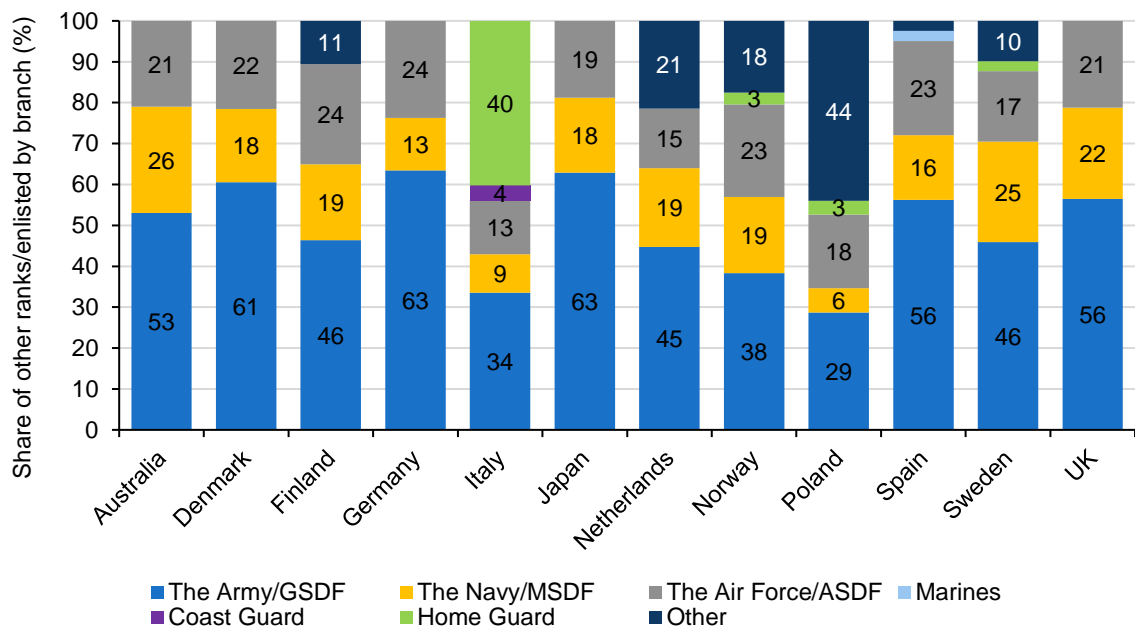


Figure 3.6 Distribution of other ranks/enlisted by branch and institution, in percent, all twelve countries. Source: National ministries of defense. For the UK, see <https://www.gov.uk/government/statistics/uk-armed-forces-biannual-diversity-statistics-2020>. Note: Defense institutions that account for less than 3 percent of the total personnel expenditures are not numbered in the figure.

3.3 Total compensation

The armed forces studied in this report compensate their military employees via several compensation categories. Figure 3.7 presents the share of each compensation category in the countries studied in this report. Sweden has the highest share for base salary among all the countries, with 87 percent of the total compensation, on average, being base salary. Finland also has a relatively high share in this regard, at 83 percent. In Poland, the Netherlands, Norway, and Australia, base salary constitutes between 70 and 80 percent of total compensation. Denmark has a value close to 70 percent, while in Japan and Italy, base salary's share of total compensation is only 60 and 59 percent, respectively.

Fixed supplements play a substantial role in the monetary incentive system in Poland, the Netherlands, Australia, Denmark, Japan, and Italy. The share of fixed supplements is between 11 and 26 percent in these countries. Irregular supplements are a significant part of the monetary incentive systems in Sweden, Finland, the Netherlands, Norway, Denmark, and Italy. Other compensation categories play occasionally a major role, such as one-time bonuses in Poland and Japan and the coverage of commuting and housing expenses in Sweden, the Netherlands, and Australia.

We have taken out spending on the pension earnings compensation category. We asked, in the survey, for estimates of pension earnings that were better than what were offered in the civilian sector. In Norway, for instance, military personnel on long-term contracts can retire seven to ten years before the standard pension age at 66 percent of pensionable income during the last year of employment. This may be an attractive incentive for potential recruits and the existing workforce. However, those countries reporting the values of the pensions have focused on the annual expenses of the ministries of defense and the armed forces. In order to make the shares spent on the various compensation categories more comparable, we omit pension expenditures. The numbers for pension earnings are available in the country analyses in Chapter 3.

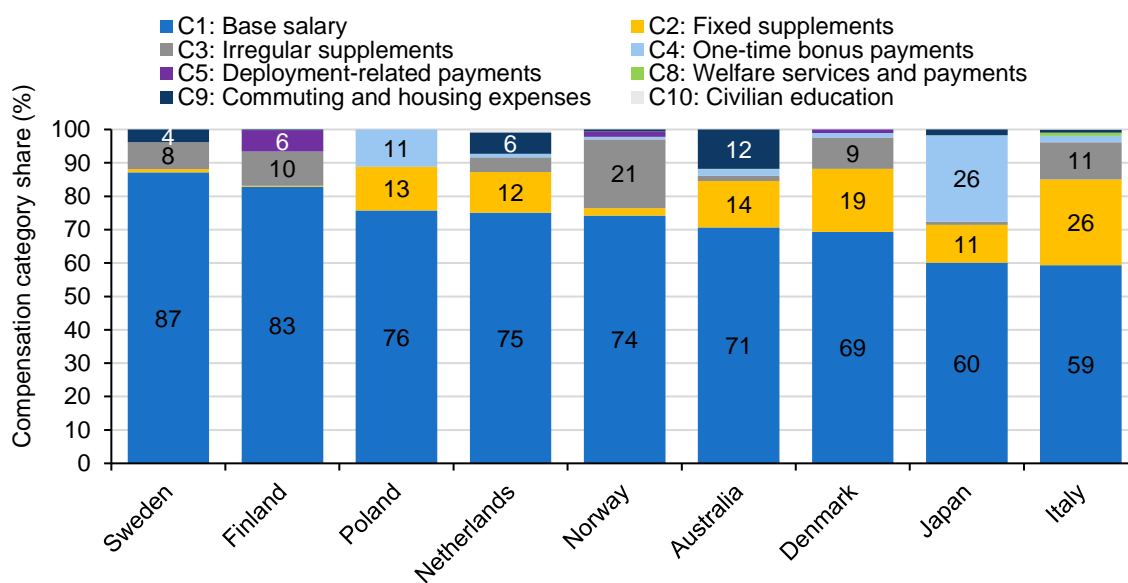


Figure 3.7 Share of each compensation category, in percent, total personnel expenditures = 100 percent, nine countries. Source: National ministries of defense. Note: The Netherlands has negative values for welfare services and payments, which are removed from the figure. The countries are ranked based on the share of base salary in the average total compensation package. Pension earnings and tax exemptions are omitted from the calculation of the shares and the figure. Compensation categories that account for less than 3 percent of the total personnel expenditures are not numbered in the figure.

The relative total pay vis-à-vis the civilian sector is an important aspect of total compensation in the armed forces. A simple comparison with the pay in the private sector and other public entities is shown in Figure 3.8. Here we compare the base salary and the total compensation that officers and other ranks/enlisted earn on average with the average national wage. The base salary is derived from information obtained from the national ministries. The total compensation is estimated by dividing the base salary by the share the base salary constitutes of the total compensation expenditures of the armed forces. Germany, Spain, and the United Kingdom did not provide sufficient quantitative information to be included in Figure 3.8.

An important assumption in the total compensation estimate is that the share of base salary is similar in both the military groups, that is, officers and other ranks/enlisted. If one of these has a lower average share of base salary in terms of their total compensation, we have underestimated their total compensation. We use data on national average wages obtained from the OECD.² This information source exploits the economies' total wages and divides them by the total number of employees. This average wage is on one hand driven down by the fact that all employees are included in the denominator, including part-time workers. On the other hand, the extreme values of high wages are included in the numerator, and the estimate is therefore sensitive to the existence of very high wages. Countries with conscription may also have a higher average wage because they need fewer other ranks and enlisted.

Figure 3.8 shows that, in all countries, the average base salary of other ranks/enlisted is lower than the average national wage. When the estimate for total compensation is taken into consideration, Italy, Japan, Norway and Poland provide higher average compensation for other ranks/enlisted. The other countries provide total compensation that is between 80 and 95 percent of the national average wages. Officers are paid base salaries that are higher than the average national wage, except in Denmark. When total compensation is considered, we see that the officers receive on average compensation that, in most cases, supersedes 150 percent of the average national wages. Note that this simple comparison does not account for formal education levels among military personnel and the average worker.

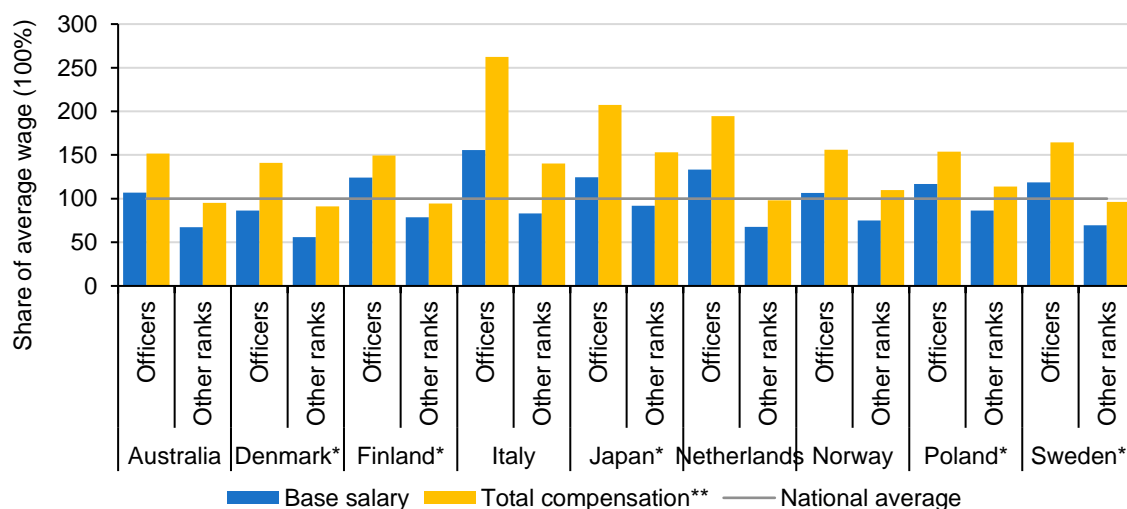


Figure 3.8 Average base salary and total compensation versus average national wage (OECD numbers), in percent of average national wage (=100%), nine countries. Source: National ministries of defense (base salary and total compensation) and OECD (average national wage). Note: Omitted countries did not provide the numbers necessary to be included in the figure. *Estimated by multiplying monthly pay by 12. **Estimated by dividing average base salary by the share of base salary in total compensation.

² https://stats.oecd.org/index.aspx?DataSetCode=AV_AN_WAGE.

3.4 Base salary

Base salary plays a large role in all the countries’ monetary incentive systems. Figure 3.7 shows base salary payments as a share of total personnel expenditures. Sweden and Finland have the highest shares, at 87 and 83 percent, respectively, while Japan and Italy have the lowest shares, at 60 and 59 percent, respectively. The other countries spend between 69 and 76 percent of the personnel expenditures on base salary.

Base salary increases typically with the rank in the armed forces. Many countries also have steps within each rank that military employees can climb to obtain a higher base salary. Therefore, we expect a gradual increase in base salary by age. This is also what we see in Figure 3.9. In Figure 3.9, we compare the average base salaries among officers by age group. The curves are normalized at the pay level for the 45–54 age group. There are differences, however, between the countries in terms of how steep the curves are. Finland has the flattest curve. Military personnel in the 15–28 age group have a base salary around 74 percent of the base salary of the 45–54 age group in Finland. Australia, the Netherlands, and Japan, on the other hand, exhibit the steepest curves. Here, the youngest age groups have around 40 percent of the base salary of the 45–54 age group.

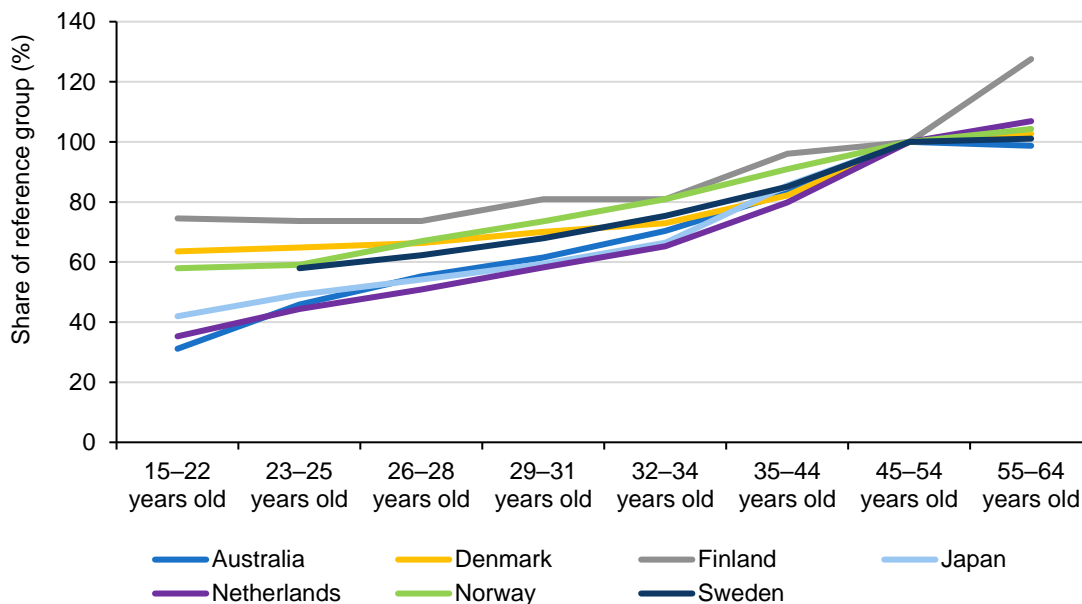


Figure 3.9 Average base salary for officers as a share of the reference group (45–54 years old), by age group, in percent, seven countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers necessary to be included in the figure. The age group 65+ years old is omitted.

Base salary typically increases with rank in the armed forces for other ranks and enlisted as well. In Figure 3.10, we compare the average base salaries among other ranks and enlisted by age groups. The curves are normalized at the pay level for the 45–54 age group. Although the same trend is visible for this group as for the officers – the older the personnel, the larger the base salary – the curves for other ranks and enlisted differ in that they are flatter. The curves also go down

for the oldest age groups. The oldest age groups are, however, less relevant because there are typically few of other ranks and enlisted in these age groups.

The countries differ in how steep the curves are. Finland and Denmark have the flattest curves. Military personnel in the 15–28 age groups have a base salary around 80–90 percent that of the 45–54 age group. Australia, Japan, the Netherlands, Norway, and Sweden, on the other hand, have steeper curves, and the youngest age groups have around 60 percent of the base salary of the 45–54 age group.

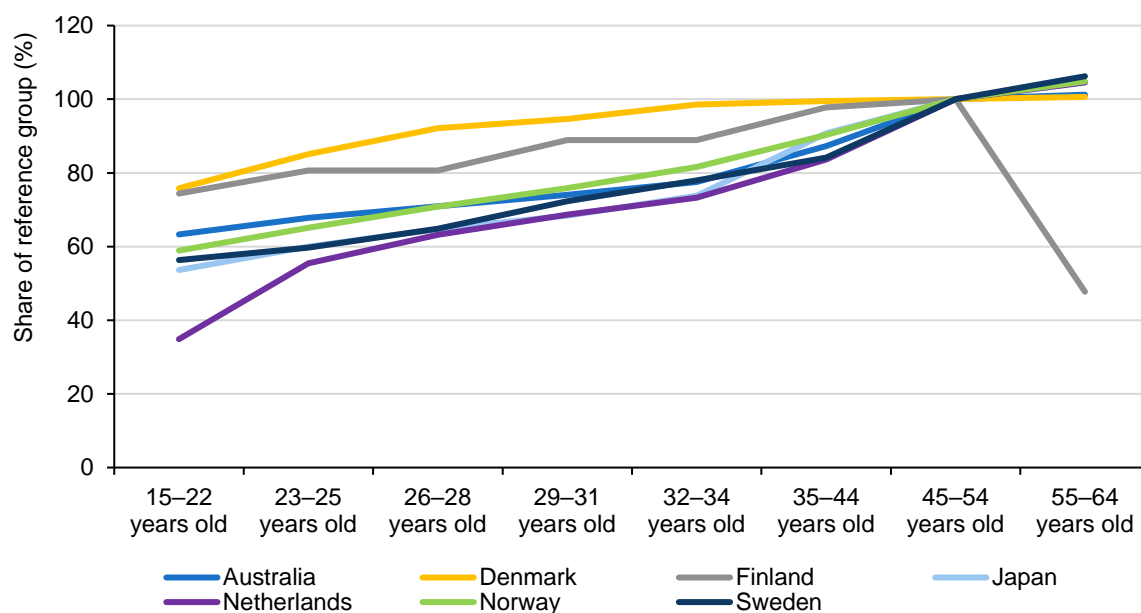


Figure 3.10 Average base salary for other ranks and enlisted as a share of the reference group (45–54 years old), by age group, in percent, seven countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers necessary to be included in the figure. The 65+ age group is omitted.

3.5 Fixed supplements

Fixed supplements are defined in this survey as regular forms of compensation linked to personal characteristics, abilities, responsibilities, environmental conditions endured, or activities and tasks undertaken. See Section 2.4 for more information.

The role of fixed supplements in the countries' monetary incentive systems vary. Figure 3.11 shows fixed supplements payments as a share of total personnel expenditures. Italy has the highest share, at 26 percent. Fixed supplements also play a significant role in Denmark, Australia, Poland, the Netherlands, and Japan, while their share is small in Norway, negligible in Sweden, and non-existent in Finland.

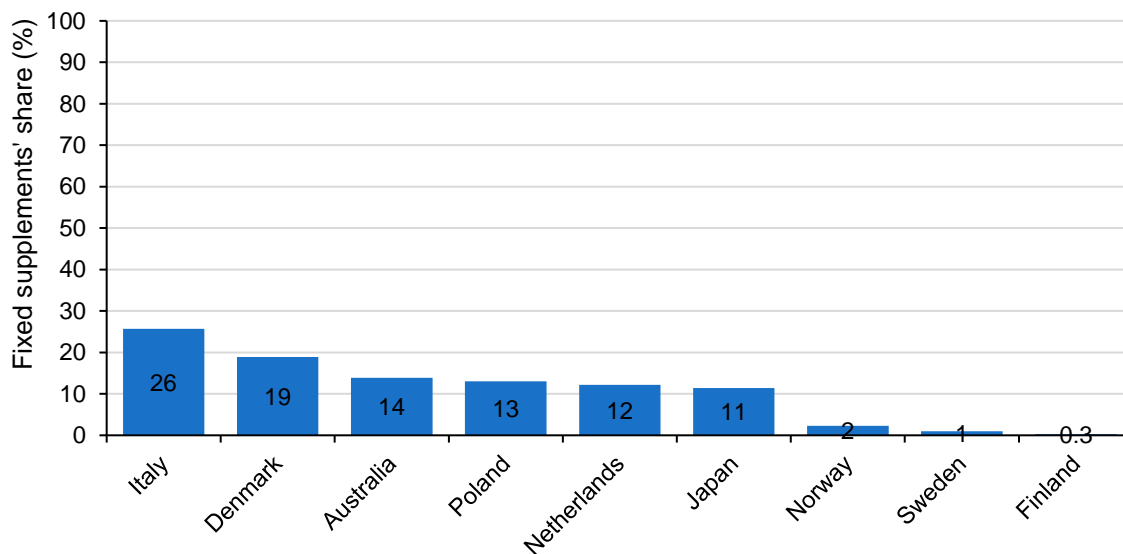


Figure 3.11 Fixed supplements as a share of total compensation, in percent, total personnel expenditures = 100 percent, nine countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers necessary to be included in the figure. Pension earnings and welfare services and payments are omitted from the calculation of the shares.

The purposes and uses of fixed supplements in the monetary incentive system differ between countries. In Figure 3.12, we compare the fixed supplements among officers by age groups. The curves are normalized at the pay level for the 45–54 age group. In Denmark and Norway, the value of fixed supplements increases by age group. In the Netherlands, the value also increases by age group, but the value decreases after the officers reach around 35–44 years old. In Australia, the value is higher for younger personnel, reaching 158 percent of the value for the 45–54 age group in the 32–34 age group. In Sweden, the use of fixed supplements is heavily skewed towards the younger age groups. Officers in their 20s receive four to eight times more fixed supplement payments than those in the 45–54 age group.

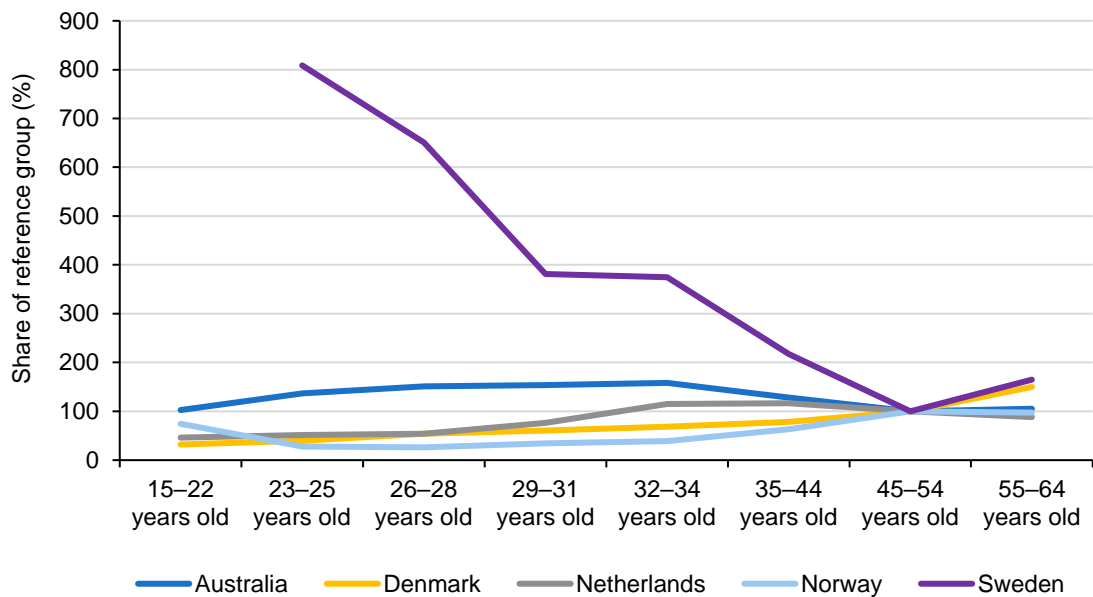


Figure 3.12 Average fixed supplements for officers as a share of the reference group (45–54 age group), by age group, in percent, five countries. Source: National ministries of defense. Note: Omitted countries either did not provide the numbers necessary to be included in the figure or provide no fixed supplements to military personnel. The 65+ age group is omitted.

Figure 3.13 shows the value of fixed supplements for other ranks and enlisted. The curves show a similar but slightly different shape than for the officers. In Denmark and Norway, the value of fixed supplements increases with age, but the curve is less steep for the age groups younger than the reference group (45–54 age group) and steeper for the older age groups. In Norway, the curve is also steeper from a young age. Fixed supplements thus play a relatively more important role for younger other ranks than for officers in Denmark. In the Netherlands, the profile for receiving fixed supplements by age group is very similar for both officers and other ranks. In Australia, however, the profile for enlisted is close to 100 percent for all age groups, instead of being paid relatively more to younger age groups, which is the case for officers. In Sweden, young other ranks receive more fixed supplements than the older age groups, as with officers, but the curve is less steep.

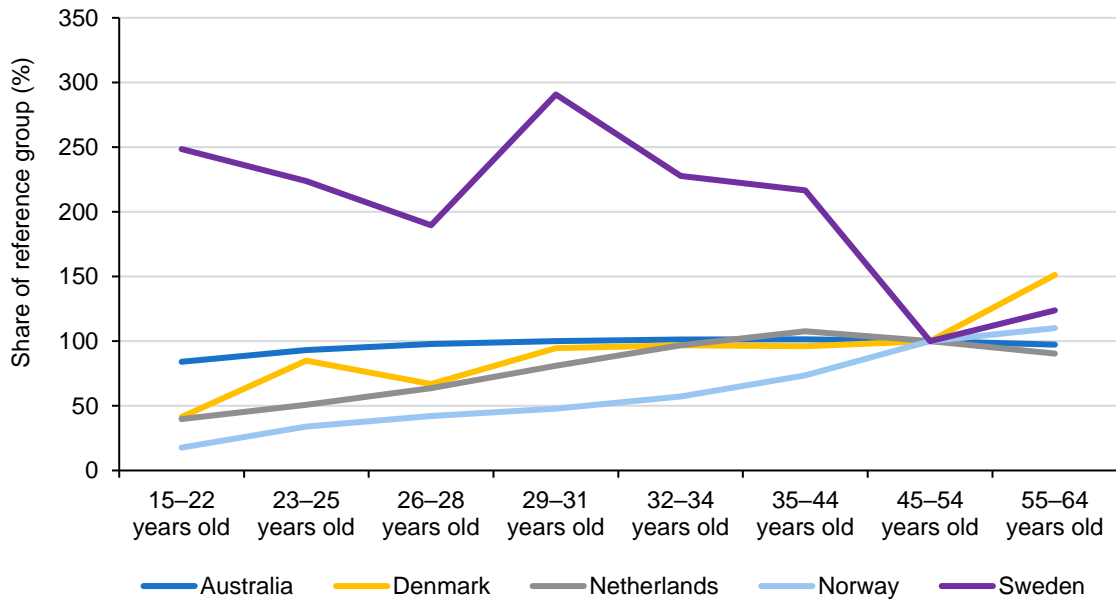


Figure 3.13 Average fixed supplements for other ranks and enlisted as a share of the reference group (45–54 age group), by age group, in percent, five countries. Source: National ministries of defense. Note: Omitted countries either did not provide the numbers necessary to be included in the figure or provide no fixed supplements to military personnel. The 65+ age group is omitted.

Figure 3.14 shows the relationship between the number of schemes for fixed supplements and the assessment of the complexity of the compensation category. The assessment was performed by the ministries of defense or an agency that has been given the responsibility of completing the survey on behalf of the ministries of defense. Denmark has only two schemes and assesses the complexity of the compensation category as simple. Italy has twelve schemes, and Germany and Japan 13. They consider the compensation category as complex, while Australia has 74 schemes and finds the compensation category to be very complex. Norway, on the other hand, has 180 schemes and assesses fixed supplements as not very complex.

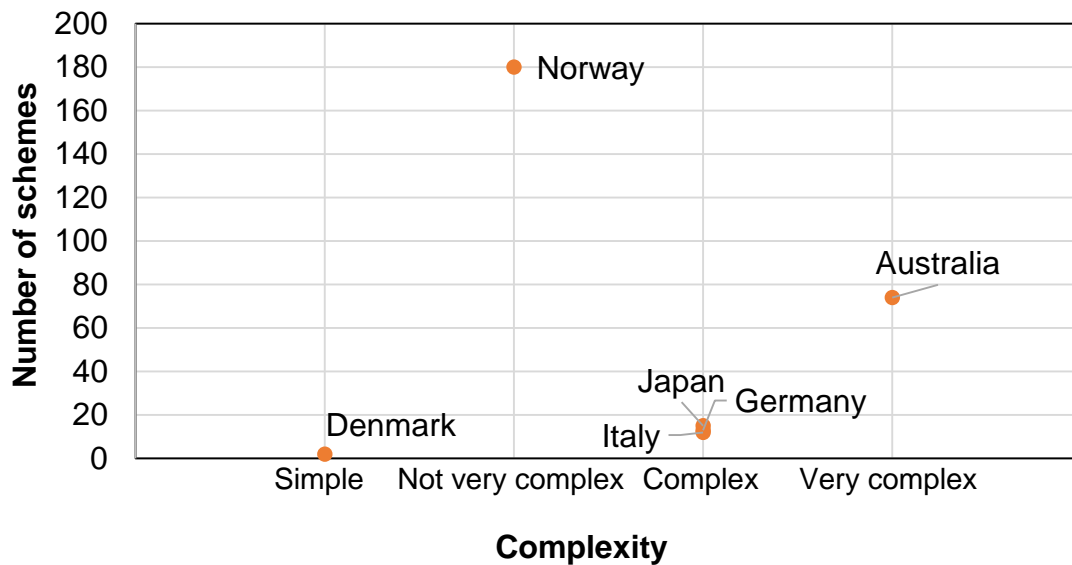


Figure 3.14 Number of schemes and complexity of fixed supplements, six countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers and/or assessments necessary to be included in the figure.

The countries have assessed how satisfied they are with the ability of the top three incentives to achieve their purposes. The top three incentives are defined as those with the highest total expenditures. In Table 3.1, we have summed up the information regarding this assessment of the top three fixed supplements schemes. With the exception of Sweden, all of the countries are satisfied or highly satisfied with the top three incentives. Sweden expresses low satisfaction with one of the top three fixed supplements incentives. The Netherlands and Poland are highly satisfied with all of their top three incentives.

Table 3.1 Degree of satisfaction with the top three fixed supplements incentives in terms of achieving their purposes.

Country	Incentive #1	Incentive #2	Incentive #3
Australia	High satisfaction	Satisfiable	Satisfiable
Germany	High satisfaction	Satisfiable	High satisfaction
Italy	High satisfaction	Satisfiable	Satisfiable
Japan	Satisfiable	Satisfiable	Satisfiable
Netherlands	High satisfaction	High satisfaction	High satisfaction
Norway	High satisfaction	Satisfiable	Satisfiable
Poland	High satisfaction	High satisfaction	High satisfaction
Spain	Satisfiable	Satisfiable	Satisfiable
Sweden	Satisfiable	Satisfiable	Low satisfaction

■ Not satisfiable
 ■ Low satisfaction
 ■ Satisfiable
 ■ High satisfaction

Source: National ministries of defense. Note: Omitted countries did not provide the numbers and/or assessments necessary to be included in the table.

The ministries of defense have reported whether each of the top three incentives have been reformed the past five years (seen from 2020 or 2021). Japan and Poland have reformed all three schemes. The Netherlands and Norway have not reformed any schemes. Australia, Germany, Italy, Spain, and Sweden have reformed one or two of the three schemes.

3.6 Irregular supplements

Irregular supplements are compensation paid as temporarily additions to the base salary. Irregular supplements are forms of compensation linked to a position or profession, workload, working hours, or place of work with variable payouts. In this survey, irregular supplements are defined as forms of compensation for which the employee cannot know the exact size of future payments without knowing the exact activities, workhours, and workload involved. See Section 2.4 for more information.

The role of irregular supplements in the countries' monetary incentive systems varies. Figure 3.15 shows irregular supplements payments as a share of total personnel expenditures. Norway has the highest share, at 21 percent. In Italy, Finland, Denmark, and Sweden, the share is between 8 and 11 percent, signaling the importance of this compensation category in their monetary incentive systems. Also, in the Netherlands, irregular supplements play a role in the incentive system. In Australia and Japan, irregular supplements constitute only 1.6 and 0.9 percent of total personnel expenditures, respectively. The share is negligible (0.1 percent) in Poland.

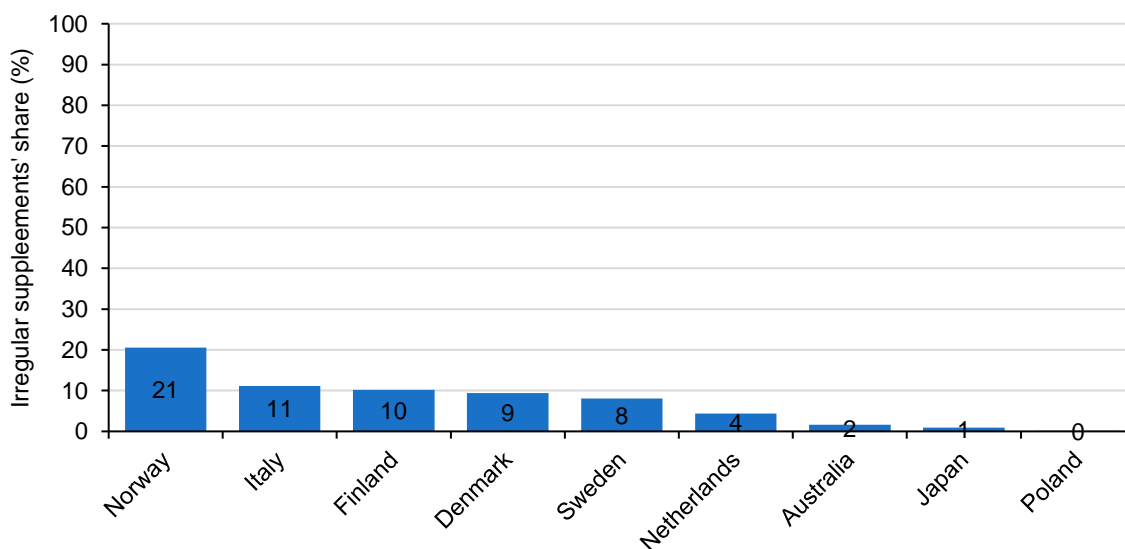


Figure 3.15 Irregular supplements as a share of total compensation, in percent, total personnel expenditures = 100 percent, nine countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers necessary to be included in the figure. Pension earnings and welfare services and payments are omitted from the calculation of the shares.

The purposes and uses of irregular supplements in the monetary incentive system differ between countries. In Figure 3.16, we compare the irregular supplements among officers by age group. The curves are normalized at the pay level for the 45–54 age group.

In Australia and Denmark, the curves show an increase in the average payments by age group, with the exception of the oldest age group. The Netherlands pays more irregular supplements to the younger age groups – 23–44 years old – than to the reference group on average. Sweden pays less to the youngest age group – 23–25 years old – but more to the other age groups younger than the reference group. Norway exhibits a similar curve to that of Sweden, but with larger pay of irregular supplements to officers in the 23–25 and 55–64 age groups. Finland does also provide data for irregular supplements but is not included in the figure because they use other age categories. In Finland, irregular supplements are highest for the youngest officers and lowest for the 45–49 age group.

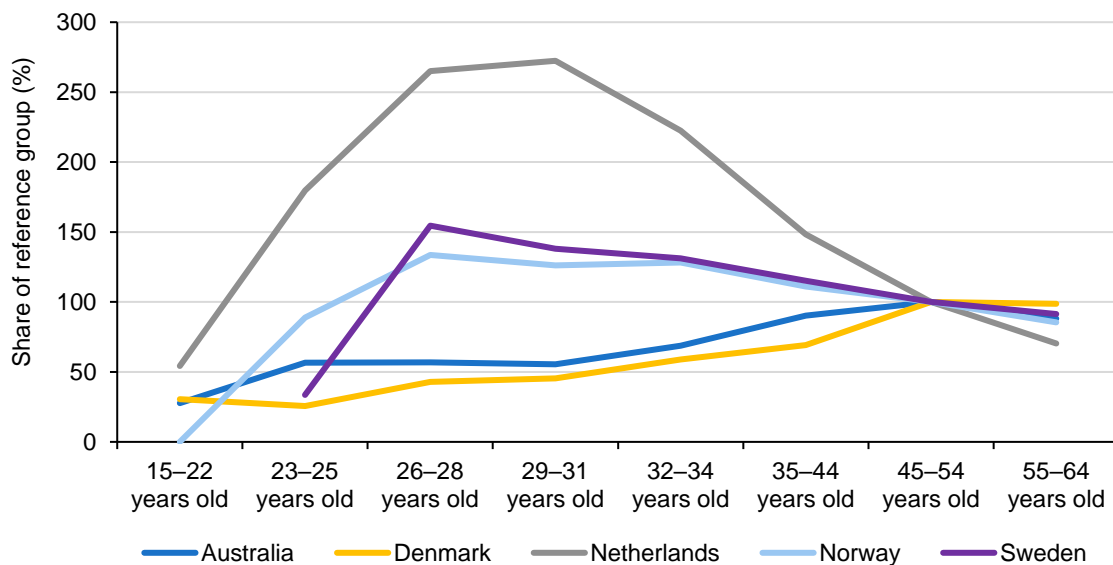


Figure 3.16 Average irregular supplements for officers as a share of the reference group (45–54 age group), by age group, in percent, five countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers necessary to be included in the figure. The 65+ age group is omitted.

Figure 3.17 shows the value of fixed supplements to other ranks and enlisted. The curves show a different shape than that for the officers. In Australia, Denmark, and Sweden, the curves are flat in the sense that most age groups receive about the same level of supplements as the reference group. In Norway, other ranks receive more in the younger age groups than in the reference group. In the Netherlands, other ranks are paid more irregular supplements if they are younger than the reference group. On average, the 23–25 and 26–28 age groups receive the largest irregular supplements payments. In Finland, not included in the figure, irregular supplements for other ranks increase by age until the age 35–39, and then the value decreases.

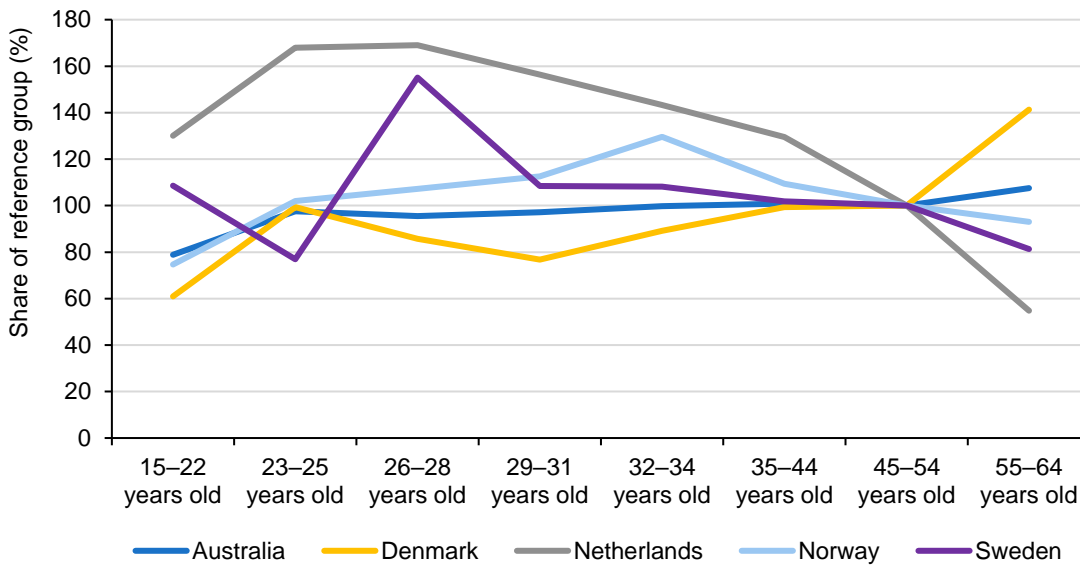


Figure 3.17 Average irregular supplements for other ranks and enlisted as a share of the reference group (45–54 age group), by age group, in percent, five countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers necessary to be included in the figure. The 65+ age group is omitted.

Figure 3.18 shows the relationship between the number of schemes for irregular supplements and the assessment of the complexity of this compensation category. The assessment was done by the ministries of defense or agencies that were given the responsibility to complete the survey on behalf of the ministries of defense. Sweden does not find its scheme for irregular supplements to be very complex, even though it has the same number of, or more, as Germany, Italy, and Japan. These last three countries have 13, 11, and 4 schemes, respectively, while Sweden has 13. Australia has 53, and Norway has 151 schemes, and they find the irregular supplements to be very complex and complex, respectively.

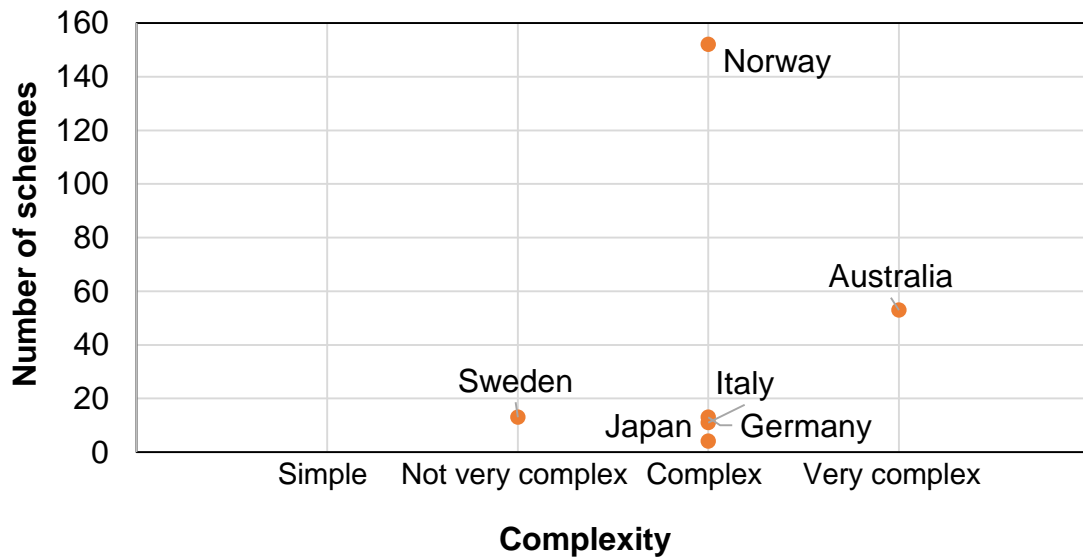


Figure 3.18 Number of schemes and complexity of irregular supplements, six countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers and/or assessments necessary to be included in the figure.

The countries have assessed how satisfied they are with the top three incentives in terms of achieving their purposes. The top three incentives are defined as those with the highest total expenditures. In Table 3.2, we have summed up the information regarding this assessment of the top three irregular supplement schemes. All the countries are satisfied or highly satisfied with some of the top three irregular supplements incentives. Italy and Sweden express low satisfaction with one of the top three irregular supplements incentives. Australia, Japan, the Netherlands, Norway, Poland, and Spain are satisfied with all three incentives.

Table 3.2 Degree of satisfaction with the top three irregular supplements incentives in terms of achieving their purposes, eight countries.

Country	Incentive #1	Incentive #2	Incentive #3
Australia	High satisfaction	High satisfaction	High satisfaction
Italy	High satisfaction	High satisfaction	Low satisfaction
Japan	High satisfaction	High satisfaction	High satisfaction
Netherlands	High satisfaction	High satisfaction	High satisfaction
Norway	High satisfaction	High satisfaction	High satisfaction
Poland	High satisfaction	High satisfaction	High satisfaction
Spain	High satisfaction	High satisfaction	High satisfaction
Sweden	High satisfaction	High satisfaction	Low satisfaction

■ Not satisfiable
 ■ Low satisfaction
 ■ Satisfiable
 ■ High satisfaction

Source: National ministries of defense. Note: Omitted countries did not provide the assessments necessary to be included in the figure.

The countries reported whether each of the top three incentives has been reformed the past five years (seen from 2020 or 2021). None of the countries have reformed all three incentives in the past five years. Australia, Finland, the Netherlands, Norway, and Poland have not reformed any of the top three irregular supplements incentives during this period. Italy and Japan have reformed one of the three incentives, while Spain and Sweden have reformed two of the three schemes.

3.7 One-time bonus payments

One-time bonus payments concern one-time compensations. Examples of one-time bonuses include sign-on bonuses, retention payments, and fulfillment bonuses. See Section 2.4 for more information.

The role of one-time bonuses in the countries' monetary incentive systems varies. Figure 3.19 shows one-time bonus payments as a share of total personnel expenditures. Japan has the highest share, at 26 percent. This high share is related to the Japanese tradition of paying annual or bi-annual bonuses in both the private and public sectors. Poland also has a high share, at 11 percent. One-time bonuses are used also in Australia, Italy, Denmark, the Netherlands, and Norway. This compensation category plays no role in the monetary incentive systems in Finland and Sweden.

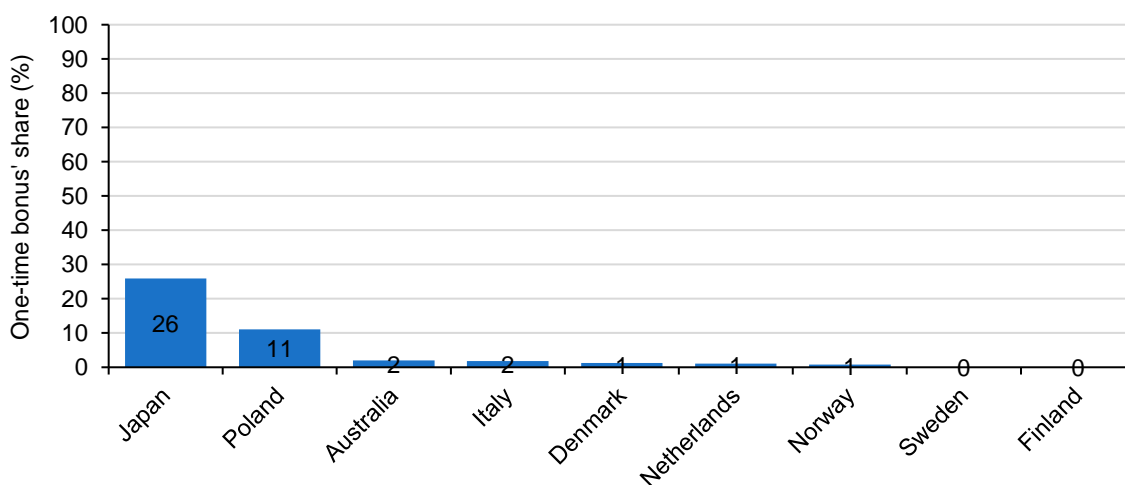


Figure 3.19 One-time bonus payments as share of total compensation, in percent, total personnel expenditures = 100 percent, nine countries. Source: National ministries of defense. Note: Omitted countries either did not provide the numbers necessary to be included in the figure or provide no one-time bonus to military personnel. Pension earnings and welfare services and payments are omitted from the calculation of the shares.

The purposes and uses of one-time bonuses in the monetary incentive system differ between countries. In Figure 3.20, we compare the payments of one-time bonuses to recipients among officers by age group. The curves are normalized at the pay level for the 32–34 age group, which acts as the reference group. Note that the reference group is a different age group than for the

other compensation categories. The reason is that Norway only pays out one-time bonus payments to officers in two age groups.

In Australia, the one-time bonuses are relatively small for officers in their 20s and highest for those in their 30s. In Denmark and Japan, the value of the one-time bonus for recipients increases with age. This holds for the Netherlands as well, except that the one-time bonus payments to personnel in the 35–44 age group is lower than the reference group (32–34 age group). In Norway, one-time bonuses are only paid out to personnel between 32 and 44 age groups.

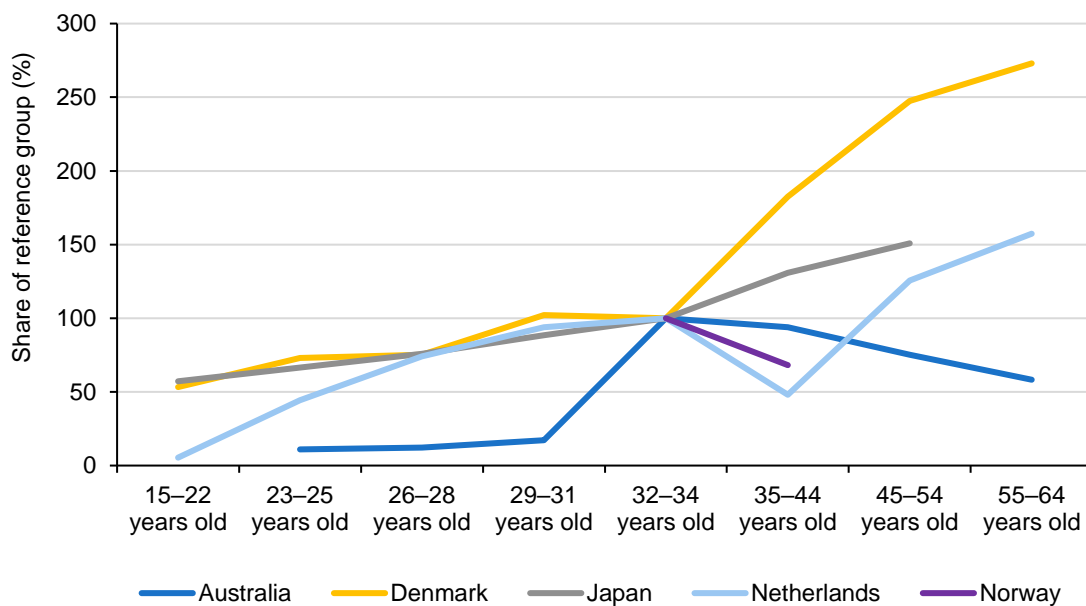


Figure 3.20 Average one-time bonus payments for officers as a share of the reference group (32–34 age group), by age group, in percent, five countries. Source: National ministries of defense. Note: We use a different reference group for one-time bonus payments than other compensation categories, because Norway pays out to fewer age groups. Omitted countries either did not provide the numbers necessary to be included in the figure or provide no one-time bonus to military personnel. The 65+ age group is omitted.

Figure 3.21 shows the value of one-time bonus to other ranks and enlisted. In Australia, Japan, and the Netherlands, the value of the one-time bonus increase with age. In Australia, the oldest age groups have however lower payments than the reference group. In Denmark, the payments of one-time bonus is similar across age groups, ranging from 85 percent and 103 percent of the reference group in the 23–44 years old age groups. Norway pays predominantly to other ranks in the age groups 29–31 and 32–34 years old.

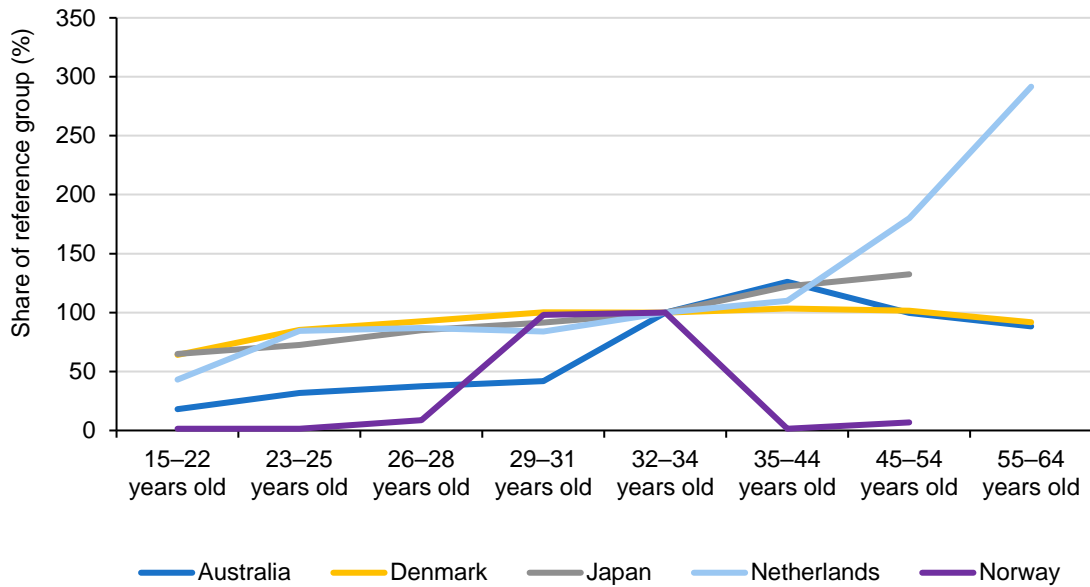


Figure 3.21 Average one-time bonus payments for other ranks and enlisted, by age group, five countries. Source: National ministries of defense. Note: We use a different reference group for one-time bonus payments than other compensation categories, because Norway pays out to fewer age groups. Omitted countries either did not provide the numbers necessary to be included in the figure or provide no one-time bonus to military personnel. The 65+ age group is omitted.

Figure 3.22 shows the relationship between number of schemes for one-time bonuses and the assessment of the complexity of this compensation category. The assessment was performed by the ministries of defense or agencies that had been given the responsibility to complete the survey on behalf of the ministries of defense. Denmark and Italy have one scheme and find one-time bonuses simple. Japan has two schemes and finds this compensation category to be not very complex. Germany and Australia have 11 and 19 schemes, respectively, and find the scheme for one-time bonuses complex.

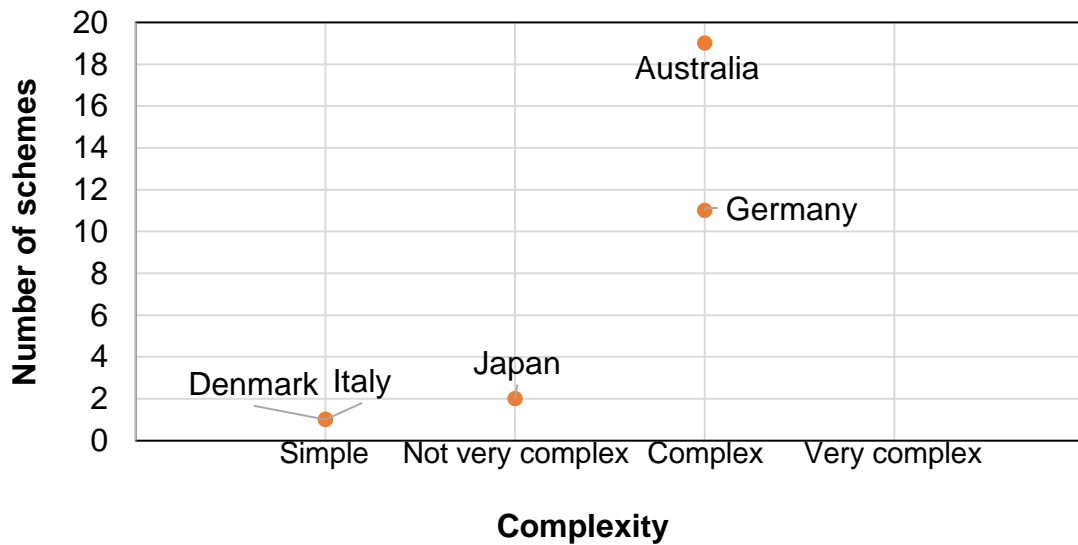


Figure 3.22 Number of schemes and complexity for one-time bonuses, five countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers and/or assessments necessary to be included in the figure.

The ministries of defense assessed how satisfied they are with the ability of the top three incentives in the compensation category of one-time bonuses to achieve their purposes. The top three incentives are defined by the highest total expenditures. In Table 3.3, we have summed up the information about this assessment of the top three one-time bonus schemes. Not all countries have three schemes in place for this compensation category. All the countries are satisfied or highly satisfied with some of the top incentives except Norway. Italy, Japan, and Spain are satisfied with their schemes. Poland is highly satisfied with all incentives.

Table 3.3 Degree of satisfaction of the top three one-time bonus incentives in terms of achieving their purposes, 8 countries.

Country	Incentive #1	Incentive #2	Incentive #3
Australia	Highly satisfied	Highly satisfied	Highly satisfied
Germany	Satisfied	Highly satisfied	Highly satisfied
Italy	Highly satisfied	Satisfied	Satisfied
Japan	Highly satisfied	Highly satisfied	Satisfied
Netherlands	Highly satisfied	Highly satisfied	Highly satisfied
Norway	Satisfied	Not satisfied	Satisfied
Poland	Highly satisfied	Highly satisfied	Highly satisfied
Spain	Highly satisfied	Highly satisfied	Highly satisfied

Source: National ministries of defense. Note: Omitted countries did not provide the assessments necessary to be included in the table.

The countries reported whether each of the top three incentives has been reformed the past five years (seen from 2020 or 2021). Australia, Japan, Italy, and Norway have reformed their schemes

in the last five years. Germany has reformed two of the three top incentives the past five years, while the Netherlands, Poland, and Spain have not reformed any of the schemes.

3.8 Coverage of commuting and housing expenses

The coverage of commuting and housing expenses is a compensation category that is in use in many military organizations. This compensation category concerns coverage of transportation, commuting, moving, and housing expenses. See Section 2.4 for more information.

The role of the coverage of commuting and housing expenses in the countries' monetary incentive systems varies. Figure 3.23 shows the coverage of commuting and housing expenses as a share of total personnel expenditures. Australia has the highest share, at 12 percent. This high share is related to Australia's need for geographical mobility in a large country with its population concentrated on the east coast. The Netherlands also has a high share, at 6 percent. Some of these expenses are related to the coverage of commuting and housing while personnel are deployed abroad. The armed forces in Sweden, Italy, and Norway, as well as the JSDF in Japan, cover commuting and housing expenses for their military personnel. The reported expenditures on this compensation category in Japan and Norway are likely lower than the actual numbers being paid out. In the case of the JSDF, we have re-categorized two schemes from fixed supplements to the coverage of commuting and housing expenses, and the estimate in Figure 3.23 does not contain these schemes because we do not have detailed information about the cost per scheme. In the case of the Norwegian Armed Forces, a substantial amount of expenditures on the coverage of commuting and housing expenses is not attributed directly to military personnel. The estimate in Figure 3.23 for Norway only contains allowances paid to individual employees. In addition, in the case of Norway, the estimate does not contain imputed rent (i.e., the difference between the market price of housing and the actual payment conducted by military personnel enjoying subsidized housing).

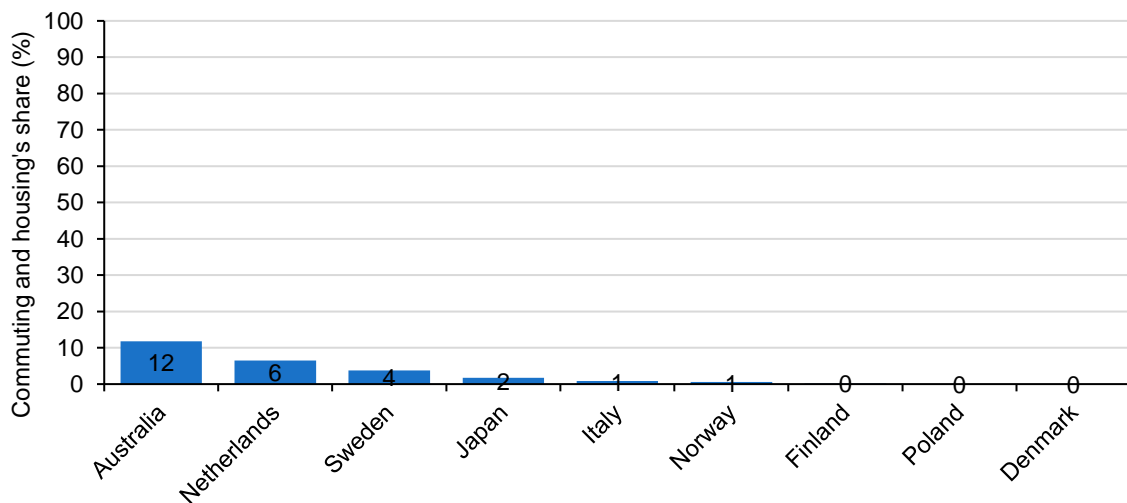


Figure 3.23 Coverage of commuting and housing expenses as share of total compensation, in percent, total personnel expenditures = 100 percent, nine countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers necessary to be included in the figure. Pension earnings and welfare services and payments are omitted from the calculation of the shares.

The purposes and uses of coverage of commuting and housing expenses in the monetary incentive system differ between countries. In Figure 3.24, we compare the payments that cover commuting and housing expenses to recipients among officers by age groups. The curves are normalized at the pay level of the 45–54 age group, which is the reference group.

In Australia and the Netherlands, the payments increase with age. In Norway, the payments, on average, are close to 100 percent of the reference group value for all age groups. In Sweden, the 23–25 age group receives, on average, the same as the reference group, while everyone in between these age groups receives slightly less.

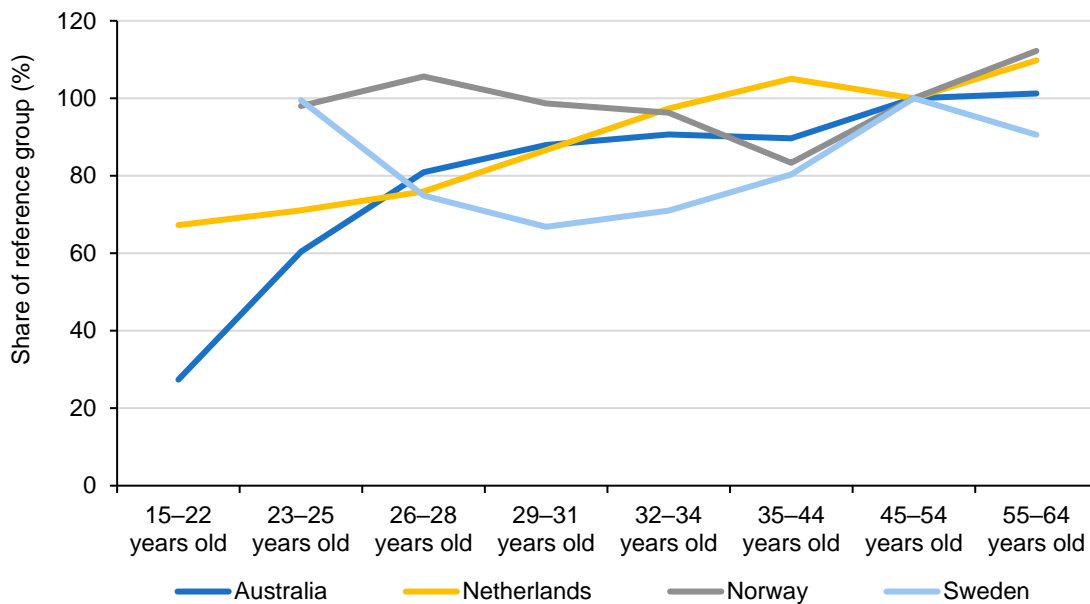


Figure 3.24 Average coverage of commuting and housing expenses for officers as a share of the reference group (45–54 age group), by age group, in percent, four countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers necessary to be included in the figure. The 65+ age group age group is omitted.

Figure 3.25 shows the value of the coverage of commuting and housing expenses for other ranks and enlisted. In general, the curves steadily increases by age group. Sweden has a steeper curve than the other countries. In Norway, those who are 29–34 have higher average payments than the reference group.

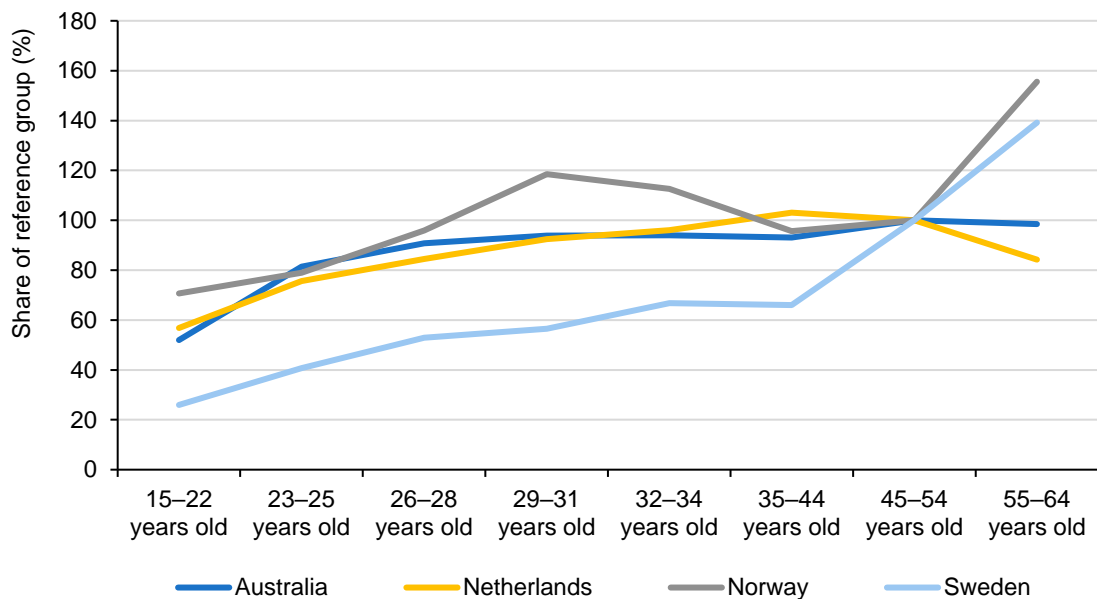


Figure 3.25 Average coverage of commuting and housing expenses for other ranks and enlisted as a share of the reference group (45–54 age group), by age group, in percent, four countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers necessary to be included in the figure. The 65+ age group is omitted.

Figure 3.26 shows the relationship between the number of schemes that covers commuting and housing expenses and the assessment of the complexity of this compensation category. This assessment is done by the ministries of defense or agencies that had been given the responsibility to complete the survey on behalf of the ministries of defense. Italy, Japan, and Sweden have few schemes and deem their systems to be simple or not very complex. Australia has 16 schemes and considers its system very complex. Norway, on the other hand, has 22 schemes in place but considers its system not very complex.

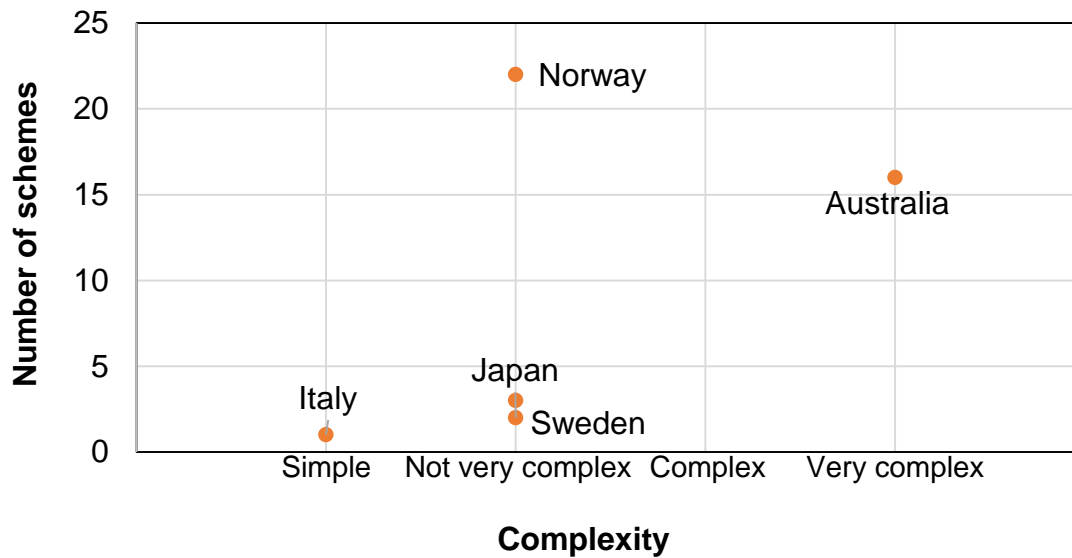


Figure 3.26 Number of schemes and complexity of the coverage of commuting and housing expenses, five countries. Source: National ministries of defense. Note: Omitted countries did not provide the numbers and/or assessments necessary to be included in the figure.

The countries have assessed how satisfied they are with the ability of the top three incentives in terms of achieving their purposes. The top three incentives are defined by the highest total expenditures. In Table 3.4, we have summed up the information about this assessment of the top three schemes for the coverage of commuting and housing expenses. Not all countries have three schemes in place for this compensation category. All the countries are satisfied or highly satisfied with at least one of the top incentives. The Netherlands is not satisfied with two of three top incentives, and Norway is not satisfied with one scheme, expresses low satisfaction with another scheme, and is satisfied with the third top three scheme. Australia and Sweden are satisfied with all top three schemes and Japan is satisfied with their two schemes. Italy, Germany and Spain are the most satisfied of the seven countries listed in Table 3.4.

Table 3.4 Degree of satisfaction of the top three schemes for the coverage of commuting and housing expenses in terms of achieving their purposes, seven countries.

Country	Incentive #1	Incentive #2	Incentive #3
Australia	■ Satisfiable	■ Satisfiable	■ Satisfiable
Germany	■ High satisfaction	■ Satisfiable	
Italy	■ High satisfaction		
Japan	■ Satisfiable	■ Satisfiable	
Netherlands	■ Not satisfiable	■ Not satisfiable	■ Satisfiable
Norway	■ Low satisfaction	■ Not satisfiable	■ Satisfiable
Spain	■ High satisfaction	■ High satisfaction	■ Satisfiable
Sweden	■ Satisfiable	■ Satisfiable	■ Satisfiable

■ Not satisfiable ■ Low satisfaction ■ Satisfiable ■ High satisfaction

Source: National ministries of defense. Note: Omitted countries did not provide the assessments necessary to be included in the table.

The countries have reported whether each of the top three incentives has been reformed the past five years (seen from 2020 or 2021). Australia, Italy, the Netherlands, Norway, and Spain have not reformed their top incentives. Germany, Japan, and Sweden have reformed their top incentives in the past five years.

3.9 Summary and conclusions

We provide a comparative summary of each compensation category by considering the similarities and differences across countries. To improve the accuracy of the analysis of the monetary incentive systems, we distinguish between the following ten compensation categories: base salary, fixed supplement, irregular supplement, one-time bonus payments, deployment related payments, pension earnings, tax exemptions, welfare services and payments, the coverage of commuting and housing expenses, and the provision of civilian education. For each of these compensation categories, we asked about the top three incentives in place, the purpose of these incentives, whether the MODs were satisfied with the incentives’ attainment of their purposes, and whether these top three incentives had been reformed in the past five years.

The similarities of the monetary incentive systems in the armed forces lie primarily in the importance of other compensation categories beyond base salary. All countries offer a portion of the salary as fixed supplements, irregular supplements, or some of the other compensation categories. In general, military personnel who face heavy workloads, uneasy work schedules, or high levels of risk are paid more in terms of types of compensation other than base salary. The countries with a high level of need for geographical mobility also induce desired behaviors with monetary incentives.

3.9.1 Base salary

Base salary plays a key role in all the countries' monetary incentive systems. It forms the core of the total compensation of military personnel. This is similar to the situation in many occupations in the civilian sector. In addition to base salary, however, military personnel also typically encounter a host of other compensation policies, which are often without any equivalents in the civilian sector. This is partly because military work involves unusual risks, hardships, and work pressures. The armed forces may also demand high mobility within the organization, both geographically and in terms of work tasks. It may therefore be that the share of personnel expenditures on base salary is relatively low in the armed forces. In our selection of countries, we see that the base salary share of personnel expenditures varies substantially. Sweden and Finland have the highest shares, at 87 and 83 percent, respectively. Japan and Italy have the lowest shares, at 60 and 59 percent, respectively. The other five countries that provided sufficient data spend between 69 and 76 percent of personnel expenditures on base salary.

Base salary increases typically with the rank in the armed forces. The countries differ in how steep the increase in base salary by age is. In the sample—Australia, Denmark, Finland, Japan, the Netherlands, Norway, and Sweden—we see a substantial difference in base salary between officers in their 20s and the reference group (45–54 years old). In Australia and the Netherlands, officers in their 20s earn a base salary that represents 55 and 51 percent, respectively, of the base salary in the reference age group. In Finland, on the other hand, officers in their 20s earn a base salary equal to 74 percent of the reference age group. The difference in base salary across age is not that large for other ranks and enlisted, but the trend is the same. In the Netherlands, other ranks in their 20s earn 64 percent of the earnings of the reference age group. In Denmark, the same age group earns 92 percent of the earnings of the reference age group.

3.9.2 Fixed supplements

Fixed supplements play a central role in some countries' monetary incentive systems. Italy, Denmark, Australia, Poland, the Netherlands, and Japan spend 26, 19, 14, 13, 12, and 11 percent, respectively, of personnel expenditures on this compensation category. Also, Norway and Sweden spend a small share of personnel expenditures on fixed supplements. Denmark has only two schemes and assesses its system to be simple. Italy has 12 schemes, and Germany and Japan 13. They consider the compensation category to be complex, while Australia has 74 schemes and finds the compensation category very complex. Norway, on the other hand, has 180 schemes and assesses fixed supplements as not very complex. Except for Sweden, all the countries are satisfied or highly satisfied with the top three incentives. Sweden expresses low satisfaction with one of the top three fixed supplements incentives. The Netherlands and Poland are highly satisfied with all the top three incentives.

3.9.3 Irregular supplements

The role of irregular supplements in the countries' monetary incentive systems vary substantially. Norway has the highest share, at 21 percent, while Italy and Finland also have relatively high shares, at 11 and 10 percent, respectively. Irregular supplements also play a role in Denmark,

Sweden, the Netherlands, and Australia. The share is negligible in Japan and Poland. Norway has 151 irregular supplement schemes, Australia has 53, Germany and Sweden have 13 each, Italy has 11, and Japan has four. None of the countries are highly satisfied with all incentives, but all the countries are satisfied or highly satisfied with some of the top three irregular supplements schemes. Australia, Japan, the Netherlands, Norway, Poland, and Spain are satisfied with all three incentives, while Italy and Sweden express low satisfaction with one of the top three irregular supplements incentives.

3.9.4 One-time bonus payments

The role of one-time bonus in the countries' monetary incentive systems vary. Japan has the highest share, at 26 percent. This high share is related to the Japanese tradition of paying annual or bi-annual bonuses in both the private and public sector. Poland also has a high share with 11 percent. One-time bonuses are also used in Australia, Italy, Denmark, the Netherlands, and Norway. Note also that bonus payments play an important role in the United Kingdom but not in Finland and Sweden. The countries with a low number of one-time bonuses, such as Denmark, Italy, and Japan, find this compensation category simple or not very complex. Countries with more than ten schemes, such as Germany and Australia, find the schemes for one-time bonuses complex. All the countries are satisfied or highly satisfied with some of the top three incentives, except Norway, which reports low satisfaction. Italy, Japan, and Spain are satisfied with their schemes. Poland is highly satisfied with all incentives.

3.9.5 Coverage of commuting and housing expenses

The role of coverage of commuting and housing expenses in the countries' monetary incentive systems varies. Australia has the highest share, at 12 percent. This high share is related to Australia's need for geographical mobility in a large country with its population concentrated on the east coast. The Netherlands also has a high share, at 6 percent, but this estimate includes schemes that cover commuting and housing expenses while personnel are deployed abroad. Also, in Sweden, Japan, Italy, and Norway, the armed forces and the JSDF cover commuting and housing expenses for their military personnel. The Norwegian share underestimates the real spending on this compensation category. Italy, Japan, and Sweden have few schemes and consider their system simple or not very complex. Australia has 16 schemes and considers its system very complex. Norway, on the other hand, has 22 schemes in place but considers its system not very complex. All the countries are satisfied or highly satisfied with at least one of the top three incentives.

3.9.6 Pension earnings

It has been difficult to assess the importance of the military pension systems as part of the monetary incentive systems with the rudimentary information we have collected in this study. Pensions system in general, and in the armed forces and the self-defense forces, in particular are complex. Notwithstanding the sheer size of pension in the total compensation package for military personnel, we had a more specific aim in mind when we included pension earnings in the survey. We wanted to know whether the armed forces offered better or worse pension compensation than

comparable civilian employers. Our goal was to understand whether the pensions in the armed forces are making them more attractive as an employer, both to potential recruits and the existing workforce. This is a rather difficult question to answer. We suggested, for the Norwegian case, that one must calculate the value as the hypothetical annual payments to special retirement pension accruals. The remainder of the pension system for military personnel is in alignment with the system for employees in the Norwegian government.

3.9.7 Deployment-related payments

The deployment-related payments constitute a small share of the countries' personnel expenditures, but they play an important role in incentivizing and accommodating deployment abroad. More than half of the countries studied assessed the complexity of the deployment-related payments, but only three countries reported the number of schemes. Australia has one scheme and assesses it as complex, Germany has 38 schemes and assesses the system as complex, and Sweden has six schemes and assesses its system to be not very complex. Spain, Norway, and the Netherlands also consider their system for deployment-related payments to be not very complex, and Italy considers it simple. All the countries are satisfied or highly satisfied with the top three incentives.

3.9.8 Other compensation categories

The remaining compensation categories—tax exemptions, welfare services and payments, and provision of civilian education—play, at best, a minor role in the countries' monetary incentive systems. The total expenditures on these compensation categories are almost negligible in the monetary incentive systems in place in most, if not all countries.

3.9.9 Summary

In Table 3.5, we show the number of schemes per compensation category and the assessments of the complexity of each compensation category.

Table 3.6 provides a summary of how satisfied the ministries of defense or armed forces are with the top three incentives within each compensation category in terms of achieving the purposes of the incentives. The figure also shows whether the top three incentives have been reformed in the past five years or not.













	Fixed supplements	Irregular supplements	One-time bonus	Deployment-related payments	Pension earnings	Tax allowances	Welfare	Commuting & housing	Civilian education
	# Complexity	# Complexity	# Complexity	# Complexity	# Complexity	# Complexity	# Complexity	# Complexity	# Complexity
	AU 74 Very complex	53 Very complex	19 Complex	1 Complex	3 Complex	3 Complex	28 Very complex	16 Very complex	19 Complex
	DK 2 Simple	3 -	1 Simple	- -	1 Not very complex	- -	- -	- -	- -
	FI - -	- Complex	- -	- -	- -	- -	- -	- -	- -
	DE 13 Complex	13 Complex	11 Complex	38 Complex	3 Complex	1 Complex	23 Complex	2 -	2 Complex
	IT 12 Complex	11 Complex	1 Simple	- Simple	- -	- -	4 Simple	1 Simple	1 Simple
	JP 13 Complex	4 Complex	2 Not very complex	- -	- -	- -	- -	4 Not very complex	- -
	NL - Complex	- Complex	- Simple	- Not very complex	- Complex	- -	- Complex	- Not very complex	- Not very complex
	NO 180 Not very complex	152 Complex	- Not very complex	- Not very complex	1 Not very complex	- -	- -	22 Not very complex	- -
	PL - Not very complex	- Simple	- Simple	- -	- -	- -	- -	- -	- -
	ES - Not very complex	- Complex	- Simple	- Not very complex	- -	- -	- Simple	- Simple	- Simple
	SE 9 -	13 Not very complex	- -	6 Not very complex	- Complex	- -	- -	3 Not very complex	- -
	UK - -	- -	- -	- -	- -	- -	- -	- -	- -

Table 3.5: Overview of number of programs and complexity assessment, by compensation category, all countries.

4 Country analysis

In this chapter, we present each country and its armed forces. The structure of each country analysis is as follows. First, we provide an executive summary for the countries. Second, we introduce the countries with general information. The introduction of each country consists of i) general demographic and geographic information, ii) general economic information, iii) alliance information, iv) foreign deployment information, v) security policy information, and vi) general information about the armed forces. Third, we present defense expenditures and the personnel situation. Fourth, we provide an analysis of the compensation categories employed in each country.

We have attempted to use the same source for general information. The World Bank offers data on demography, geography, and the economy for all twelve countries, including for all other countries.³ Thus, we can exploit the World Bank data for ranking the twelve countries among all countries in the world. For geography data, we use the World Bank's surface area. For Norway and Sweden, these numbers experience a large increase in 2013. We use pre-2013 data for these countries. For data on economic complexity, we use the Atlas of Economic Complexity.⁴ The atlas also provides main industries and a comparison of the level of complexity and income level. We derive information on employment rates from the OECD. We use data from NATO on defense expenditures and the distribution of these expenditures on personnel, equipment, infrastructure, and other expenditures. For non-NATO members, we use World Bank number for gross defense spending. The World Bank numbers are derived from Stockholm International Peace Research Institute (SIPRI), which follows NATO principles for the defense spending estimates. We use national information for the distribution of defense expenditures on personnel, equipment, infrastructure, and other expenditures. For the ranking of the countries' gross defense expenditures, we use the World Bank data. The numbers for demography and the economy are from 2020.

The information on each country's armed forces are collected from the respective ministries of defense. We have supplemented this information for some countries from webpages from the ministries and the armed forces. Some text pieces that fit perfectly into the country analyses are copied and pasted directly into the text. We have not cited these text strings in order to sustain the flow of the language. Those interested in more in-depth information about specific countries' incentive systems should visit the webpages of the respective armed forces.

4.1 Australia

4.1.1 Executive summary

Australian defense expenditures were 25.2 billion euro in 2020, representing 1.94 percent of the GDP. This is a relatively high share – third among twelve countries studied in this report.

³ <https://data.worldbank.org/>.

⁴ <https://atlas.cid.harvard.edu>.

Personnel expenditures accounted for 32.9 percent of total expenditures, which is a very low share among the studied countries, ranking eleventh. The military workforce is close to 60,000 personnel. Nearly half of the military workforce works in the Army. Officers account for 27 percent of the military workforce, and enlisted account for 73 percent. The demographics of the military workforce skew relatively young in that 59 percent are less than 35 years old. Australia ranks fourth in this regard among the selected countries. Australia has a monetary incentive system in which base salary constitutes 71 percent of the total personnel expenditures while fixed supplements and the coverage of commuting and housing expenses make up most of the remaining personnel expenditures. In terms of the share of base salary, Australia is sixth out of the nine countries that provided numbers for base salary. The increase in base salary by age is relatively steep for both officers and enlisted. Australia has the third largest emphasis on fixed supplements. The emphasis on irregular supplements is, however, low in the Australian monetary incentive system. The distribution of fixed supplements among officers shows that younger personnel receive a larger share of these incentives than older personnel. For enlisted personnel, the distribution is close to equal, meaning that the incentives in place affect both younger and older personnel. Australia has, by far, the strongest emphasis on the coverage of commuting and housing expenses. This is related to the need to sustain high geographical mobility among military personnel in a vast country with a highly concentrated population. These incentives are relatively equally distributed by age. Australia has many schemes for several of the compensation categories. The overall impression is that Australia finds the monetary incentive system to be complex to very complex. Still, Australia is mostly satisfied or highly satisfied with how the incentives work in the Australian Defence Forces.

4.1.2 Introduction

Australia is the largest country in Oceania, in terms of both area and population. The country covers 7,741,220 km² and is the sixth largest country in the world by area. Australia has no land borders, and its marine jurisdiction connects to international waters, as well as the marine jurisdictions of several other countries. Indonesia, New Zealand, Papua New Guinea, the Solomon Islands, Timor-Leste, and the French territory of New Caledonia share marine borders with Australia. Australia has 25.7 million inhabitants and ranks as having the 55th largest population in the world. The population density is 3.3 inhabitants per km², making Australia one of the least densely populated countries in the world. In Australia, 16.2 percent of the population is 65 years and older. This is the 41st highest share in the world, but as a developed country, this share is relatively low.

Australia is the 13th largest economy in the world, with a nominal GDP of 1,198 billion euro (1,981 billion AUD) in 2020. The GDP per capita was 46,628 euro (77,097 AUD) in 2020. Australia is ranked as the 91st most complex economy. This means that the Australian economy is less diverse and technologically advanced in its export sector than many other Western countries. The composition of Australian export products is heavily dominated by natural resources. The employment rate is 72.7 percent, 6.7 percentage points higher than the OECD average.

Since the British Armed Forces left Australia in 1870, colonial forces and federal forces have defended Australian autonomy and sovereignty. Since the formation of the Federation of Australia in 1901, Australia has maintained various alliances with Western countries. Until the 1940s, Australia remained a close ally of the United Kingdom, fighting alongside it in the Boer Wars and in WW1. In 1951, Australia created a trilateral security treaty with New Zealand and the US (ANZUS) to cooperate in security matters in the Pacific region. In 2021, Australia, the United Kingdom, and the United States introduced a trilateral security pact, called AUKUS. AUKUS deals with security issues in the Indo-Pacific, and the alliance partners will aid Australia in acquiring nuclear-powered submarines.

Australia has, as of 2020, 2,267 military personnel deployed abroad. The Australian Defence Forces (ADF) take part in operations in the South Pacific, Indo Pacific, and Middle East Region, as well as in Asia and Africa.⁵

With the economic and military rise of China, the potential for tension and conflict in the greater Asia-Pacific region has increased. China is important to the Australian economy, but “the relationship has come under strain” in recent years.⁶ Australia has chosen to stand up against Chinese diplomatic attempts to subdue criticism. The Australian Security Intelligence Organisation (ASIO) believes that the security of Australia will remain challenging and complex in the near future. The main threats are terrorism, espionage and foreign interference compounded by rapidly changing technologies.⁷

The ADF consists of the Australian Army, the Royal Australian Navy, and the Royal Australian Air Forces. The Military Services are supported by the following Corporate Services: the Australian Defence Force Headquarters, Inspector General Australian Defence Force, and Joint Capabilities Group.⁸ The Coast Guard is a part of the Australian border force, which is a part of the Department of Home Affairs. Australia has a *de facto* Coast Guard in the Maritime Border Command. The organization is enabled by the Australian Border Force and the ADF. In addition, Australia has several volunteer-based coast guard organizations. The Australian Maritime Border Command is led by a Rear Admiral from the Navy, but its activities are coordinated from the Australian Border Force Headquarters in Canberra.

4.1.3 Defense expenditures

The Australian defense expenditures for 2019/20 were 25.2 billion euro (38.3 billion AUD).⁹ This makes up 1.94 percent of GDP. In absolute numbers, Australia had the twelfth highest military spending in the world in 2020.

⁵ <https://www.defence.gov.au/operations>

⁶ <https://www.dfat.gov.au/geo/china/china-country-brief>

⁷ <https://www.asio.gov.au/resources/asio-annual-report-2021-22>

⁸ <https://www.defence.gov.au/about/organisation>

⁹ [PORTFOLIO ADDITIONAL \(defence.gov.au\)](https://www.defence.gov.au/PORTFOLIO_ADDITIONAL).

Figure 4.1 shows the split between personnel, equipment, and other expenditures. The figure shows that 31.5 percent of defense expenditures are devoted to personnel (workforce). Equipment (capability acquisition program) and other expenditures (operations, capability sustainment program, and operating) constitute 33.5 and 35.0 percent of the defense expenditures, respectively. These numbers are derived from the planned expenditure on Key Cost Categories from the Australian Department of Defence (ADOD), in which workforce is seen as equivalent to personnel expenditures.

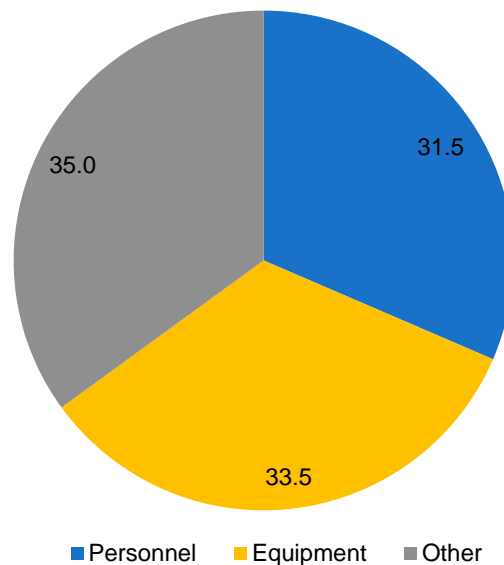


Figure 4.1 Distribution of defense expenditures, in percent. Source: https://www.defence.gov.au/sites/default/files/2022-02/2020-21_Defence_PBS_00_Complete.pdf. Note: 2020–2021 Budget Estimate.

Figure 4.2 shows the distribution of the personnel expenditures on the various compensation categories. Most of personnel expenditures is devoted to base salary, at 71 percent. This is followed by fixed supplements and the coverage of commuting and housing expenses, at 14 and 12 percent of personnel expenditures, respectively. Irregular supplements and one-time bonus payments are relatively small, at 1.6 and 2.0 percent of personnel expenditures.

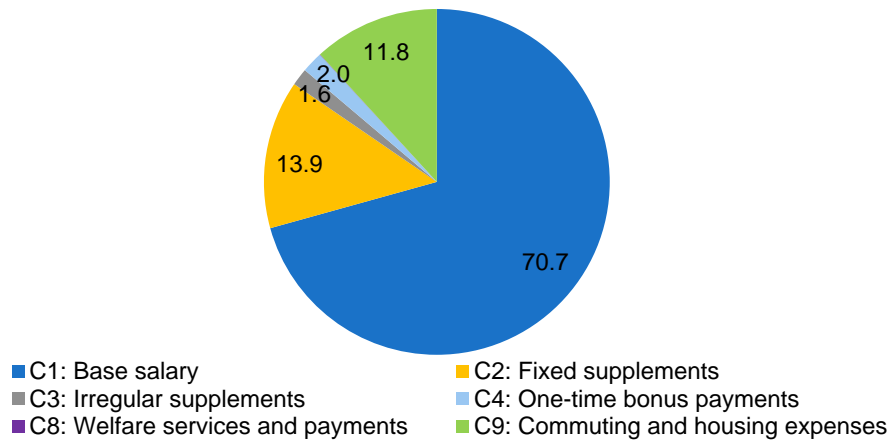


Figure 4.2 Personnel expenditures, per compensation category, in percent. Source: The ADOD.

4.1.4 The personnel situation

The ADF had a total of 59,569 permanent members in 2020–2021. The number of military personnel in each branch is shown in Figure 4.3. There are 16,097 officers and 43,472 enlisted in the ADF. The Army has close to 30,000 military personnel, while the Navy and the Air Force have around 15,000 military personnel each.

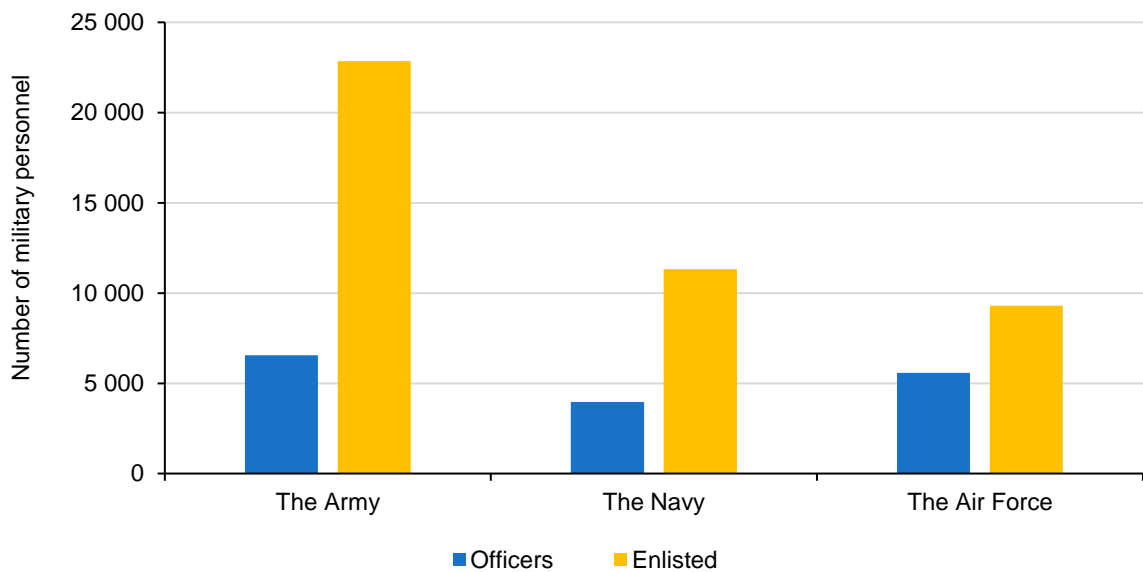


Figure 4.3 Number of military personnel, by branch, officers and enlisted. Source: The ADOD.

Figure 4.4 shows the distribution of officers by branch. Forty-two percent of the officers are employed in the Army, 24 percent in the Navy, and 34 percent in the Air Force.

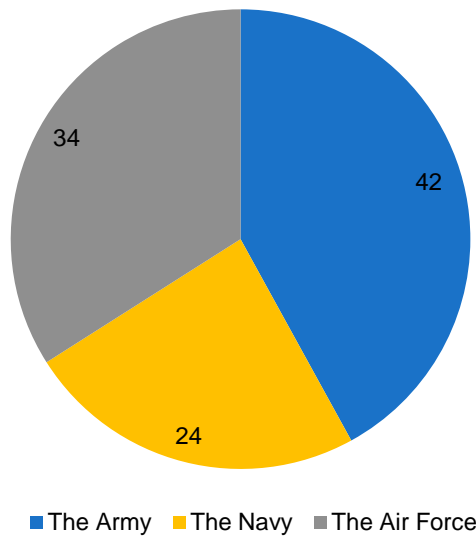


Figure 4.4 Share of officers by branch, in percent. Source: The ADOD and [Table B.19: ADF permanent and Reserve members, 2020-21 / Transparency Portal](#).

Figure 4.5 shows the distribution of enlisted by branch. Fifty-three percent of enlisted are employed in the Army, 26 percent in the Navy, and 21 percent in the Air Force.

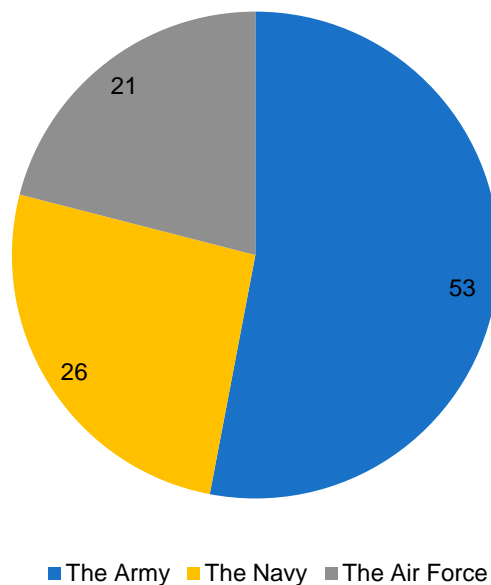


Figure 4.5 Share of enlisted by branch, in percent. Source: The ADOD and [Table B.19: ADF permanent and Reserve members, 2020-21 / Transparency Portal](#).

The ADF also includes reservists and contingent personnel. The ADOD has not provided the numbers of these groups of personnel. The ADF is based solely on voluntary professionals and employs no conscripts.

Figure 4.6 shows the age distribution among military and civilian employees. Note that the age groups contain fewer cohorts for the younger age groups as compared to the older age groups. The officers have a fairly similar distribution by age. If we sum up the age groups from 26 to 34 (nine age cohorts), they constitute 30 percent of officers, more than the age group 35–44 (27 percent) and the age group 45–54 (18 percent). The enlisted are relatively young. The 15–25 group makes up 33 percent of the total number of enlisted, and the 26–34 group makes up 34 percent of the enlisted. Civilians in the ADF are significantly older than the military employees. Only 20 percent of civilians are under 35 years old, and 55 percent are older than 44 years old.

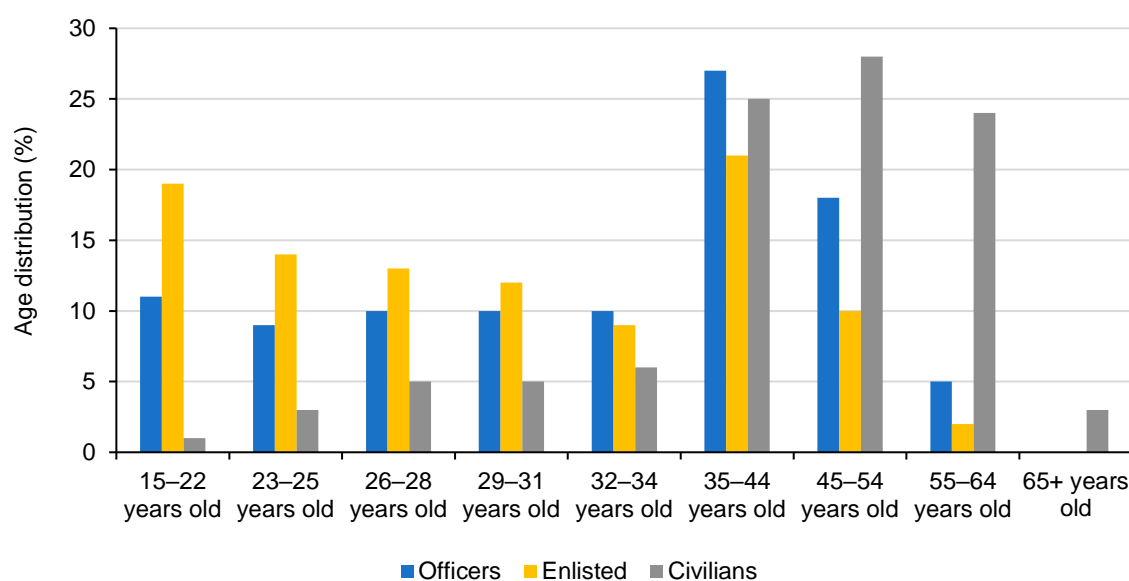


Figure 4.6 The age distribution among the officers, enlisted, and civilians, in percent (each employee group sums up to 100 percent). Source: The ADOD.

As of November 2020, 2,267 military employees in the ADF were deployed abroad. This represents around 4 percent of the total number of personnel in the ADF. Of the military employees deployed abroad, 27 percent were deployed in peacetime establishments and 73 percent were deployed in crisis establishments.

4.1.5 Compensation categories

4.1.5.1 Data description

Australia provides annual numbers for permanent forces over fiscal year 2019–2020, including only those who have served the whole year. We do not know whether the numbers provided are per employee or per recipient. Australia provides the number and complexity of the schemes for all the compensation categories. Additionally, they provide top three incentives for each compensation category, their satisfaction level, and whether the incentives have been reformed in the past five years.

4.1.5.2 Base salary

Base salary makes up 71 percent of all personnel expenditures in the ADF. An independent Tribunal sets the base salary, taking into consideration the unique nature of military service, as well as civilian industry standards where applicable.

Each career stage for each employment type is aligned to one of 20 pay grades, which are distributed between officers and enlisted. Base salary is aligned with the pay grade and rank of the individual.

Table 4.1 Overview of permanent ADF base salary ranges by rank, 2019–20. Equivalent refers to ranks from other branches than the Army.

Rank	Minimum salary (euro)	Maximum salary (euro)
Officer of the permanent force (equivalent)		
Lieutenant General	250,324	296,723
Major General	148,244	180,783
Brigadier	121,625	165,321
Colonel	92,984	157,829
Lieutenant Colonel	79,082	150,185
Major	55,381	135,290
Captain	43,389	128,412
Lieutenant	36,068	75,605
2nd Lieutenant	33,699	70,580
Other rank of the permanent force (equivalent)		
Warrant Officer Class 1	49,133	75,620
Warrant Officer Class 2	45,253	70,069
Staff Sergeant	43,736	67,597
Sergeant	39,105	64,646
Corporal	33,791	59,113
Lance Corporal	31,084	54,944
Private Proficient	30,441	54,301
Private	29,812	53,675

Source: [Table B.30: Permanent Australian Defence Force salary ranges by rank, 2019-20 | Transparency Portal](#).

In Figure 4.7, the average base salary is shown for each age group and separately for officers and enlisted. The average base salary increases for older age groups, including the 45–54 years old age group. For the older age groups, that is, those 45 years old and over, the base salary is similar on average, both for officers and enlisted personnel. The increase is steeper for officers than for enlisted personnel.

Pay increases in ADF base salary occur through centralized wage setting and individual wage setting. Every three years, the ADF makes a formal submission to the Tribunal to renew and/or revise the salary arrangement. This submission may entail an increase in salary to keep up with the cost of living and/or recognize significant additional value or savings made collectively by the ADF.

The individual wage could be raised when individuals are awarded higher pay grades as they gain skills and qualifications. High-performing individuals can also be expected to climb up the rank system more quickly.

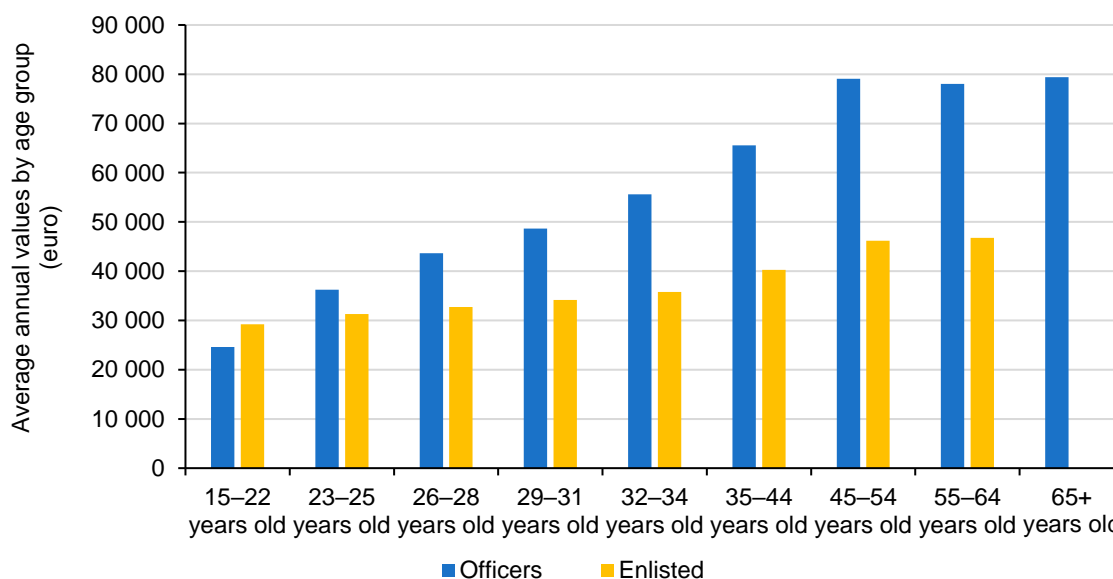


Figure 4.7 Distribution of base salary, by age group, officers and enlisted, per employee, annual values in euro. Source: The ADOD.

4.1.5.3 Fixed supplements

Fixed supplements make up 14 percent of Australian personnel expenditures. There are 74 schemes for fixed supplements. The supplements are generally given as allowances for certain ranks and postings associated with risk and hardship. The ADOD assesses the monetary incentive system for this compensation category to be very complex.

The distribution of fixed supplements by age group is shown in Figure 4.8. In contrast to the distribution of base salary, the average fixed supplements per military employee are not higher for older age groups. For officers, the allowances seem to become lower after age 34. This is likely due to older officers being less likely to be exposed to postings associated with risk, hardship, and inconvenience. For enlisted, fixed supplements are very similar, on average, in all age groups.

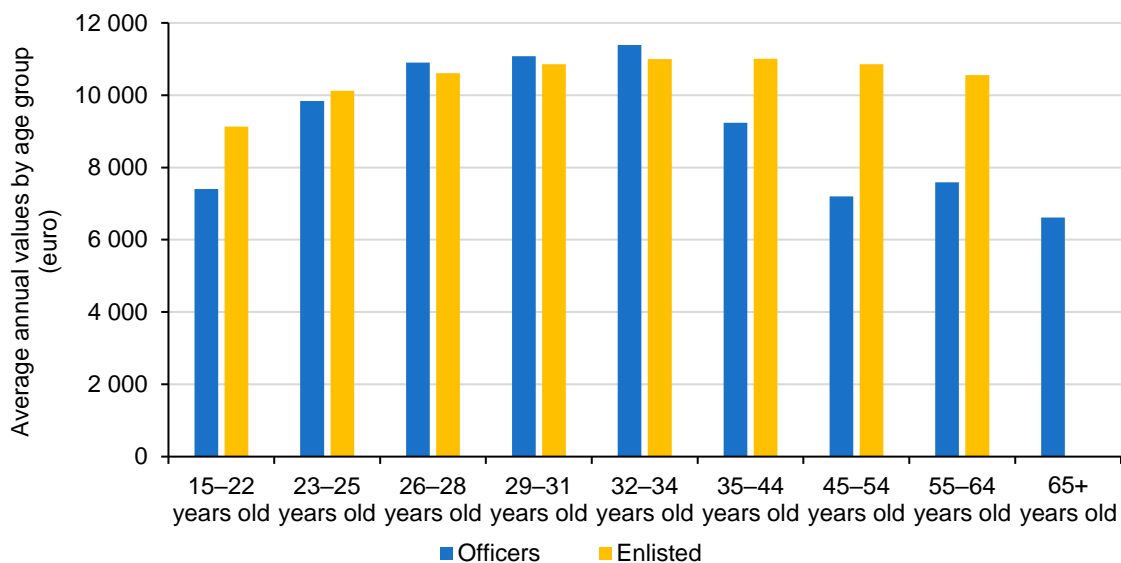


Figure 4.8 Distribution of fixed supplements, by age group, officers and enlisted, per employee/recipient, annual value in euro. Source: The ADOD.

The three fixed supplements with the largest annual expenditures are the 1) Service Allowance, 2) Maritime Allowance, and 3) Special Forces Allowance. The ADOD reports that the purposes of all three incentives are to improve recruitment, increase retention, induce more effort, provide satisfactory completion of employees' careers, and incentivize deployment abroad. The ADOD is highly satisfied by the ability of the Service Allowance to achieve these objectives, and satisfied with the Maritime Allowance and Special Forces Allowance. The Maritime Allowance incentive was reformed in the past five years, while neither the Service Allowance scheme nor the Special Forces Allowance scheme was reformed in this time period.

The Service Allowance is paid to all military employees below the rank of Lieutenant Colonel (and equivalent) to compensate for the special demands of a military profession. Examples of these military specific demands include the requirement to be on call and the liability to work long and irregular hours, including weekends and public holidays. The Service Allowance is also meant to compensate personnel for the turbulence of being moved frequently, often at short notice; living and working in uncomfortable conditions; and the inconvenience of frequently being away from one's home location.

The Trainee and Reserve Allowance are paid to trainees who have not achieved the minimum qualification for their employment type and reservists when they are on duty. These allowances equate to the "service" allowance for these groups of members.

Maritime Allowances are comprised of maritime disability allowance and maritime sustainment allowance. The Maritime Disability Allowance compensates military members for disabilities associated with service in the maritime environment, including seagoing ships and seagoing submarines. This allowance is paid on an annual basis to military members when they are serving in a unit assigned to a seagoing vessel or submarine. The Maritime Sustainment Allowance is

paid to encourage members to continue to undertake sea service. The allowance increases over time according to the length of time that members have spent at sea. Eligible members are credited with an additional 10 days of annual leave per year.

The Special Forces Allowance also consists of Disability and Sustainment Allowances. These Special Forces Allowances compensate military members for disabilities associated with service in the Special Forces environment. This work environment is typically extreme and represents the highest degree of endeavor, endurance, and military capability asked of ADF members. The sustainment component of the allowance encourages service members to remain in or subject to service in Special Forces units. Eligible service members are credited with an additional 10 days of annual leave per year.

4.1.5.4 Irregular supplements

Irregular supplements are a relatively small part of the ADF's personnel expenditures, making up only 1.6 percent of total personnel expenditures. Like the fixed supplements, irregular supplements are meant to compensate service members for hardship and inconvenience. Irregular supplements are more closely related to tasks and short-term duties than fixed supplements. The magnitude of this compensation category also varies more closely with the type of hardship and inconvenience experienced by the personnel and less with the expected inconvenience related to rank and the environment of operations.

There are 53 schemes for irregular supplements in the ADF. The ADOD considers the monetary incentive system for irregular supplements to be very complex.

Figure 4.9 shows the distribution of irregular supplements by age group for both officers and enlisted. The average annual payment of irregular supplements is close to 1,700 euro for enlisted personnel regardless of age group. Only the age group 15–22 receive significantly lower average payments. Among officers, personnel who are 23–34 also receive around 1,700 euro, while older officers receive between 2,500 and 4,000 euro on average.

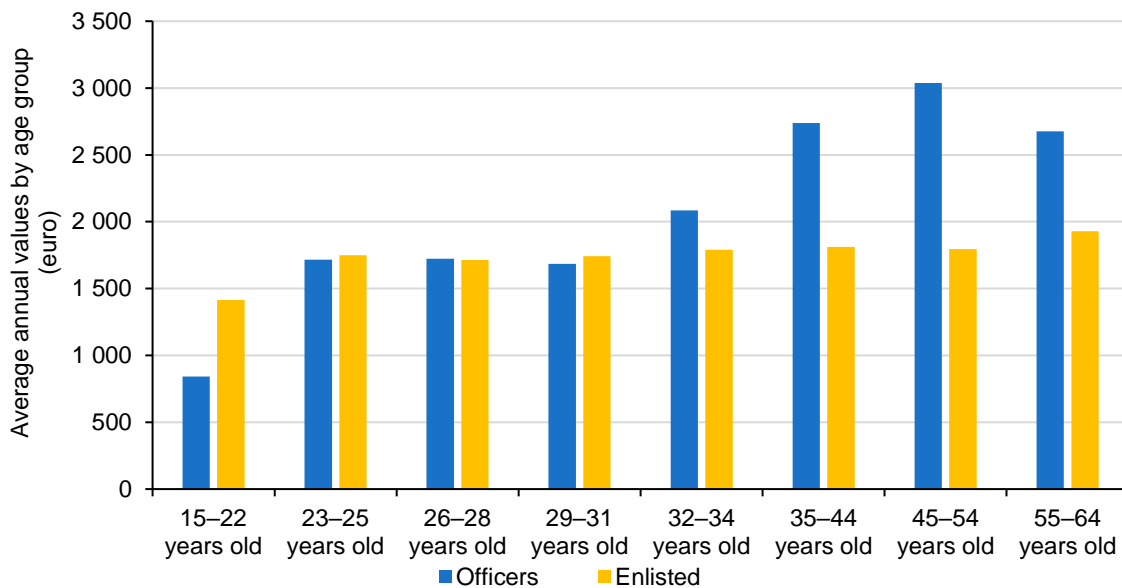


Figure 4.9 Distribution of irregular supplements, by age group, officers and enlisted, per employee/recipient, annual values in euro. Source: The ADOD.

The three irregular supplements with the largest annual expenditures are the 1) District Allowance, 2) Field Allowance, and 3) Higher Duty Allowance. The purposes of all three top incentives are to improve recruitment, increase retention, induce more effort, provide for satisfactory completion of employees' careers, and to incentivize deployment abroad. The purposes of the irregular supplements are therefore the same as those of the fixed supplements compensation category. The ADOD is satisfied with all three top incentives' ability to achieve these purposes. None of the top three incentives has been reformed the last five years.

District Allowance compensates for service in a location in Australia that involves hardship. The hardship must be caused by remoteness, a harsh climate, and/or a higher cost of living. Personnel posted to a seagoing ship for which the home port is in a remote location are also eligible for this allowance.

Remote locations are graded according to the difficulty of the area, and the allowance rate varies accordingly. The rate is higher if the military employees have dependents.

Table 4.2 Overview of the District Allowance, condition, location grade and annual rate, in euro.

Item	Condition	Location grade	Annual rate (euro)
1	A member who lives in.	A	608
		B	1,733
		C	2,168
		D	3,036
		E	3,469
2	A member with dependants who lives out, and item 3.a of this table does not apply.	A	1,736
		B	4,950
		C	6,193
		D	8,673
		E	9,913
3	a. A member with dependants who lives out and one or more of those dependants meet all of these conditions. i. The dependant is an ADF member or an APS employee in Defence. ii. The dependant is paid ADF district allowance or district allowance under the Defence Enterprise Agreement 2017-2020 as in force on 16 August 2017. b. A member with dependants (unaccompanied) who lives out. c. A member without dependants who lives out. d. A member of the Reserves who is undertaking Reserve Service and who is required to live out.	A	868
		B	2,477
		C	3,097
		D	4,336
		E	4,956

Source: [Division 1: ADF district allowance – general and rates | Pay and Conditions \(defence.gov.au\)](#).

The Field Allowance compensates military members for the requirement to live and work in uncomfortable conditions in the field, limited home contact, an inability to use leisure time effectively, and working exceptionally long and irregular hours. A ‘field’ location is a land-based area where military activities are conducted and access to facilities that are normally available in a barracks or domestic accommodation is limited or non-existent. There are two levels of allowance depending on the availability of facilities, such as access to meals. Eligible employees receive either 43.9 euro (72.5 AUD) (Tier 1 hardship) or 25.9 euro (42.8 AUD) (Tier 2 hardship) per day.¹⁰ Recipients receive 10 days additional leave for every 100 days of field duties.

The Higher Duties Allowance is paid to encourage and reward members who are directed to perform duties in a vacant higher position for more than five consecutive days. While performing higher duties, the member is paid the salary of their usual pay grade at the next one or two ranks.

4.1.5.5 One-time bonus payments

The ADF spends 2 percent of its personnel expenditure budget on one-time bonuses. The bonuses are offered to personnel with specific ranks and competencies. For some military careers, such as

¹⁰ [Division B.13: Field allowance | Pay and Conditions \(defence.gov.au\)](#).

submariners, the civilian labor market is close to non-existent, so qualified personnel outside the military are difficult to find. This makes bonuses and incentive schemes an important tool via which to retain qualified personnel.

The ADF operates with 19 schemes for one-time bonuses. The ADOD assesses the incentive system for one-time bonuses to be complex.

In Figure 4.10, the average payments for one-time bonuses by age group for officers and enlisted are shown. There are relatively small payments on average to personnel between 15 and 31 years old. Among officers, the largest recipients are personnel in their 30s. On average, officers between 32 and 44 years old receive around 60,000 euro (100,000 AUD). Enlisted over 30 years old receive smaller payments, on average, than officers. They receive, on average, between 25,000 and 40,000 euro.

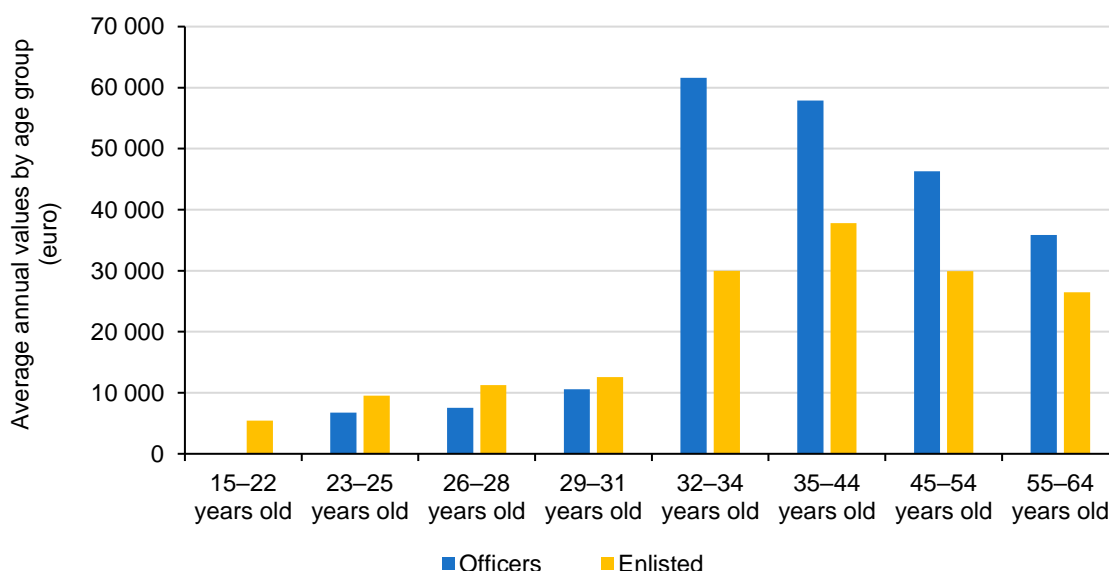


Figure 4.10 Distribution of one-time bonuses, by age group, officers and enlisted, per employee/recipient, annual values in euro. Source: The ADOD.

The three one-time bonuses with the largest annual expenditures are the 1) Military Superannuation & Benefits Scheme Retention Benefit, 2) Submariner Capability Assurance Bonus, and 3) Navy Retention Incentive Payment. The purposes of all these three one-time bonuses are to improve recruitment, increase retention, induce more effort, provide for satisfactory completion of employees' careers, and to incentivize deployment abroad.

The Military Superannuation & Benefits Scheme Retention Benefit provides a payment for an eligible member after 15 years of continuous service in return for an agreement to continue to serve until the completion of 20 years of service. The benefit is an amount equal to a member's annual salary, including the Service Allowance. Access to this retention benefit ceased for new members as of October 6, 2005.

The Submarine Capability Assurance Payment is intended to help retain skilled and experienced submariners and attract new members from inside and outside the Royal Australian Navy into the submarine workforce. Employees may only receive the bonus payment if they hold a submarine sea qualification and are not undertaking any other bonus schemes. The bonus is paid annually and calculated according to the submariner’s years of seagoing submarine service.

Table 4.3 Overview of Submarine Capability Assurance Payment, length of service and annual rate, in euro.

If your total length of qualified service is	Amount
Less than 3 years	9,072
3 to 5 years	15,120
6 to 8 years	24,192
9 years or more	30,240

Source: <https://pay-conditions.defence.gov.au/submarine-capability-assurance-payment>.

The Navy Retention Incentive Payment is a payment made at specific intervals to certain ranks (the first ranks for officers and enlisted) within the Navy as a retention incentive. The payment is set at around 12,000 euro (20,000 AUD) at the start of the next calendar year after the completion of service.¹¹ To be eligible, members must meet rank, fitness, and performance standards.

4.1.5.6 Deployment-related payments

As of 2020, the ADF deployed 2,267 personnel abroad. This represents nearly 4 percent of Australian military personnel. Deployment-related payments do not constitute a large share of the ADF’s personnel expenditures, but for deployed personnel, this compensation category makes up a substantial share of their total payments.

Figure 4.11 shows the average annual deployment-related payments among military personnel deployed to peacetime establishments and crisis establishments abroad. The payments make up around 6,000–10,000 euro (10,000–14,000 AUD) on average in all age groups and for both officers and enlisted. Compared to other compensation categories, the deployment-related payments are consistent over age groups and rank. The reason for this is that the payments are not related to rank or pay grade but, rather, the circumstances, hardship, and cost of being deployed abroad.

¹¹ [Navy retention incentive payment | Pay and Conditions \(defence.gov.au\)](https://pay-conditions.defence.gov.au/submarine-capability-assurance-payment).

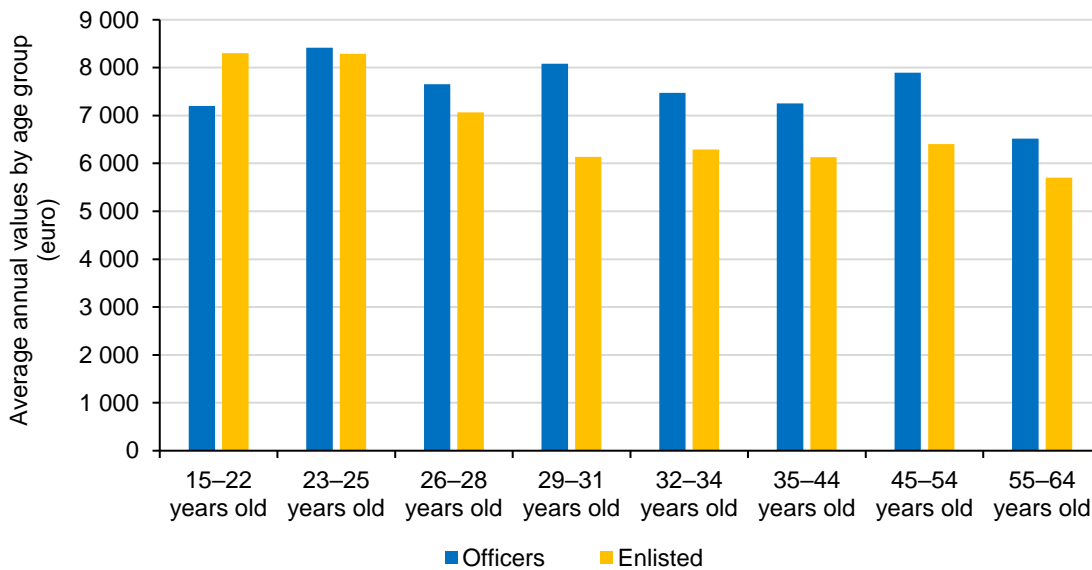


Figure 4.11 Average deployment-related payments among recipients of this compensation category, by age group, officers and enlisted, per employee/recipient, annual values in euro. Source: The ADOD.

The ADOD states that the ADF has one deployment-related payments scheme in operation. At the same time, it provides three one-time bonuses with the largest yearly expenditures: the 1) Deployment Allowance, 2) Location Allowance, and 3) Overseas Living Allowance. The ADOD assesses the monetary incentives scheme(s) to be complex.

The Deployment Allowance is intended to compensate members for the hazards, stress, and environmental factors that they are likely to experience over the term of a warlike or non-warlike deployment. To receive the Deployment Allowance, members must be assigned to duty on a warlike or non-warlike deployment and must enter the area specified for the deployment. The rates of the allowance depend on the deployment location and the status assigned by the Minister of Defence to the deployment, that is, either warlike or non-warlike. The rates are calculated per day and range between 56.7 euro (93.7 AUD) per day to 104.7 euro (173.2 AUD) per day.¹² Deployment allowances are exempt from income tax.

The Location Allowance assists members and, in some circumstances, their families with the difficult conditions that may be encountered at an overseas location. The member must perform duty at the hardship location for 28 continuous days to be eligible for this benefit. This allowance is not paid if the member is eligible for the Deployment Allowance. The annual rates and the corresponding hardship location grades are shown in Table 4.4.

¹² [Division 1: Deployment allowance | Pay and Conditions \(defence.gov.au\)](https://www.defence.gov.au/Division-1:Deployment-allowance-Pay-and-Conditions).

Table 4.4 Overview of the Location Allowance, hardship location grade and annual rate, unaccompanied and accompanied personnel, in euro.

Hardship location grade	Rate for an unaccompanied member (euro per year)	Rate for an accompanied member (euro per year)
A	Nil	Nil
B	Nil	Nil
C	10,407	15,610
D	13,876	20,814
E	17,344	26,017
F	20,814	31,220

Source: <https://pay-conditions.defence.gov.au/pacman/chapter-16/part-2a>.

Overseas Living Allowances are paid to personnel who perform duties at an overseas location for a period in excess of 6 months. Overseas Living Allowances consist of three individual allowances: the Cost of Living Adjustment, Cost of Posting Allowance, and Child Supplement Allowance. The Cost of Living Adjustment is an allowance provided to a service member at a posting location where goods and services are more expensive than in Australia. The Cost of Posting Allowance helps to compensate a service member for financial and non-financial disadvantages due to an overseas posting. These disadvantages include the loss of family, friends, and support networks in Australia; the cost of maintaining links to Australia; missing significant family events and milestones; the loss of spouse or partner income, and superannuation and delay in spouse or partner career advancement. The Child Supplement Allowance is provided to assist with the extra costs of maintaining a dependent child at the overseas posting location.

4.1.5.7 Pension earnings

The ADF offers pension earnings for military employees. The average payment for each age group is presented in Figure 4.12. The younger recipients receive a higher pension than the oldest age groups.

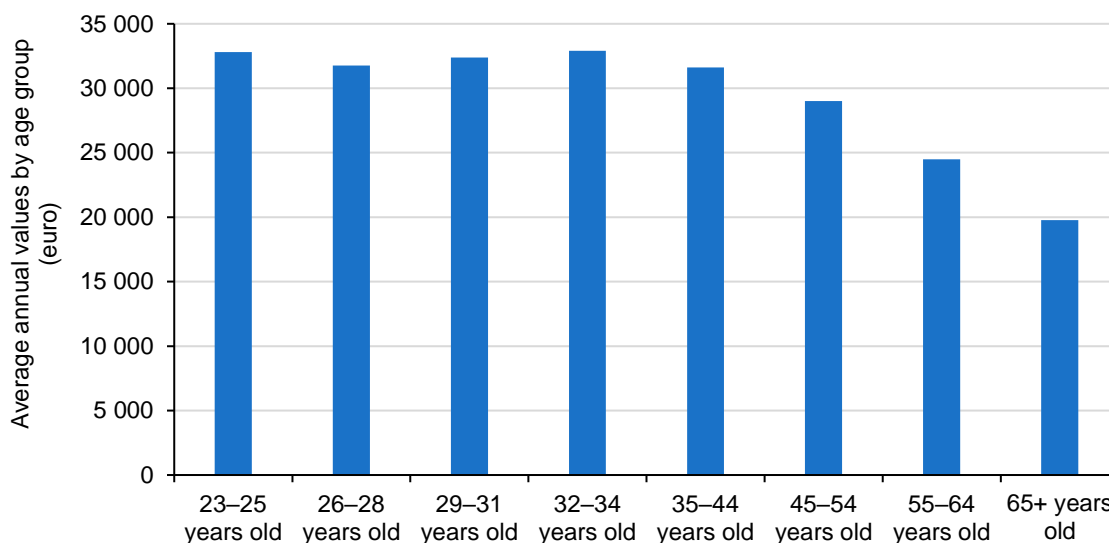


Figure 4.12 Average amounts for all primary pensioners (retirement, redundancy) and invalidity pensioners (disablement), officers and enlisted together, annual values in euro. Source: The ADOD.

There are currently three systems in place: 1) Defence Force Retirement and Death Benefits (DFRDB), 2) the Military Superannuation and Benefits Scheme (MSBS), and 3) ADF Super. As DFRDB and the MSBS closed to new members in 1991 and 2016, respectively, only ADF Super is available for new employees. In addition to these retirement benefits, all three schemes provide serving employees with death and invalidity (disablement) benefits, which includes pension options. Members enrolled in DFRDB and the MSBS can elect to convert some of their pension to a lump sum, which permanently reduces their ongoing pension.

Under the DFRDB scheme, ADF members who serve for a minimum of 20 years are entitled to receive a pension upon discharge. The pension is calculated using a service member's final salary and years of service. The pension is indexed bi-annually and payable for the rest of the service member's life. Once the service member passes away, a portion (62.5 percent) of this pension is payable to the members' eligible spouse and/or children. A child's pension is calculated in addition to the spouse entitlement.

Under the MSBS, members may access a pension beginning at 55 if they are discharged. This pension is calculated using an average of the member's salary over the last 3 years of service, their total years of service, and an age factor, as outlined in the MSBS rules. The pension is indexed bi-annually and payable for the rest of the member's life. Once the member passes away, a portion (67 percent) of this pension is payable to the member's eligible spouse and/or children. A child's pension is calculated in addition to the spouse entitlement.

Finally, ADF Super is the ADF Superannuation scheme, which commenced for new ADF members in 2016. The ADOD contributes 16.4 percent of the employee's superannuation salary to the ADF Super account during the employment period.

The top three incentives, in terms of expenditure, for the defense budget are 1) the DFRDB, 2) the MSBS, and 3) the ADF Cover. The ADF Cover is a death and invalidity (disability) benefit. The ADOD assesses the incentive system for pension earnings to be complex.

The purposes of the DFRDB were to improve recruitment, increase retention, and provide for satisfactory completion of employees' careers. The ADOD is highly satisfied with this incentive in achieving its purposes. The incentive has been reformed in the past five years.

The purposes of the MSBS are to improve recruitment and provide for satisfactory completion of employees' careers. The ADOD is satisfied with this incentive's ability to reach its purposes. This incentive scheme has been reformed in the past five years.

The third incentive – the ADF Cover – is intended to provide death and invalidity (disability) benefits, and the ADOD does not consider other purposes for this incentive. The ADOD is not satisfied (low satisfaction) with this incentive in achieving its purpose. This scheme has been reformed in the past five years.

4.1.5.8 Tax exemptions

The ADOD reports that three schemes for tax exemptions exist for military personnel in the AFD. These are 1) Tax Exemptions for Deployment Salary and Allowances, 2) the Untaxed Reservist Salary, and 3) the Salary Packaging Scheme. Because we do not study reservists, we do not discuss the Untaxed Reservist Salary any further.

Taken together, the ADOD considers the tax exemption incentive system to be complex. The purposes of these incentives are to improve recruitment, increase retention rates, induce more effort, provide for satisfactory completion of employees' careers, and incentivize deployment abroad. The ADOD is satisfied with the incentives in achieving their purposes. None of the three incentives have been reformed in the past five years.

Tax Exemptions for Deployment Salary and Allowances is a scheme that covers members of the ADF who receive the Deployment Allowance. These members may be exempt from tax on the salary and allowances while deployed in specified areas. The exemption only applies to the salary, allowances, and bonuses paid to the member while on deployment.

The Salary Packaging Scheme is a benefit available to ADF members, as well as other government employees. It enables individuals to purchase certain goods or services out of their pre-tax salaries by foregoing part of their future salaries in return for the ADF providing them with benefits of a similar value. Because the benefits are purchased with pre-tax dollars, the individual only pays income tax on their reduced salary. Items that can currently be salary packaged include airline lounge memberships, motor vehicles, child care in an ADOD-contracted childcare center, computer software, work-related travel, income protection insurance, and laptop and notebook computers.

4.1.5.9 Welfare services and payments

The ADF provides 28 schemes for welfare services and payments to its military employees. The ADOD considers this compensation category system very complex.

Figure 4.13 shows the average annual amount of welfare services and payments. The figure does not include the cost of medical and dental or leave provisions. The amount increases with age.

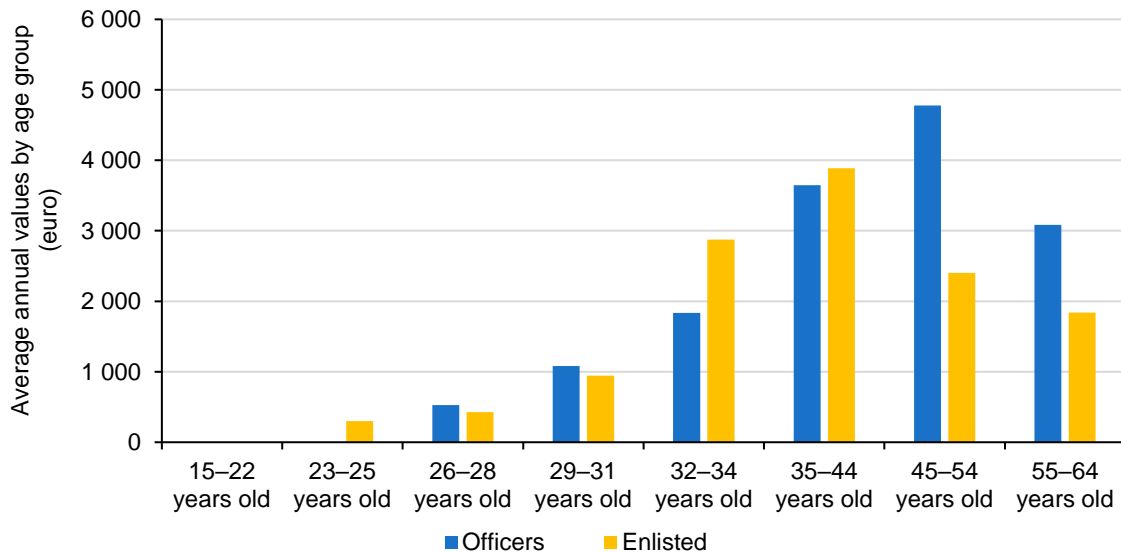


Figure 4.13 Average amounts of welfare services and payments, by age groups, for officers and enlisted, per employee/recipient, annual values in euro. Source: The ADOD. Note: the figure does not include the cost of medical and dental or leave provisions.

The three welfare services with the largest annual expenditures are: Medical and Dental Coverage, 2) Medical Absence from Duty (paid sick leave), and 3) Paid Parental Leave. The purposes of these top three incentives are to improve recruitment, increase retention rates, induce more effort, and provide for satisfactory completion of employees' careers. The ADOD considers all three schemes to be satisfactory in terms of achieving these purposes. Only Paid Parental Leave has been reformed in the past five years.

Free Medical and Dental Care is provided to permanent members and reservists undertaking continuous duty.

All permanent members are eligible for Medical Absence from Duty when they are unfit for health reasons. There is no limit on the number of days a member can be granted, although long term or consistent leave absences would be reviewed by ADF health professionals to ascertain fitness for ongoing service.

All permanent employees are provided Paid Parental Leave. Maternity Leave is granted to a service member who is pregnant or has recently given birth, allowing for an absence of 52 weeks,

including 14 weeks of paid leave and the remainder as unpaid leave. Parental Leave for 28 days is granted to a service member to care for and engage with a child following its birth or when it comes into the service member's care. A member may be eligible for additional Paid Parental Leave (maximum of 10 weeks) if the member is the primary caregiver for the child during the period of leave.

In this report, we are predominantly interested in welfare services and payments that go beyond what other citizens may expect to receive from their employer. If medical and dental care, paid absence from work, and parental leave are not provided universally to citizens of Australia, then these incentives may represent high-value compensation to military employees in the ADF.

4.1.5.10 Coverage of commuting and housing expenditures

The compensation category for the coverage of commuting and housing expenditures plays an important role in the ADF's monetary incentive system. Of the personnel expenditures are 14 percent related to commuting and housing. The geography of the Australian continent, with most areas being sparsely populated, explains the importance of this compensation category. The ADF provides 16 schemes of this incentive type. The ADOD considers this compensation category very complex.

Figure 4.14 shows that military personnel receiving coverage for commuting and housing are paid relatively large amounts of compensation in comparison with the other compensation categories. Officers older than 25 years receive transfers over 13,000 euro (22,000 AUD), while enlisted receive, on average, transfers between 11,000 and 13,000 euro (18,000 and 21,000 AUD).

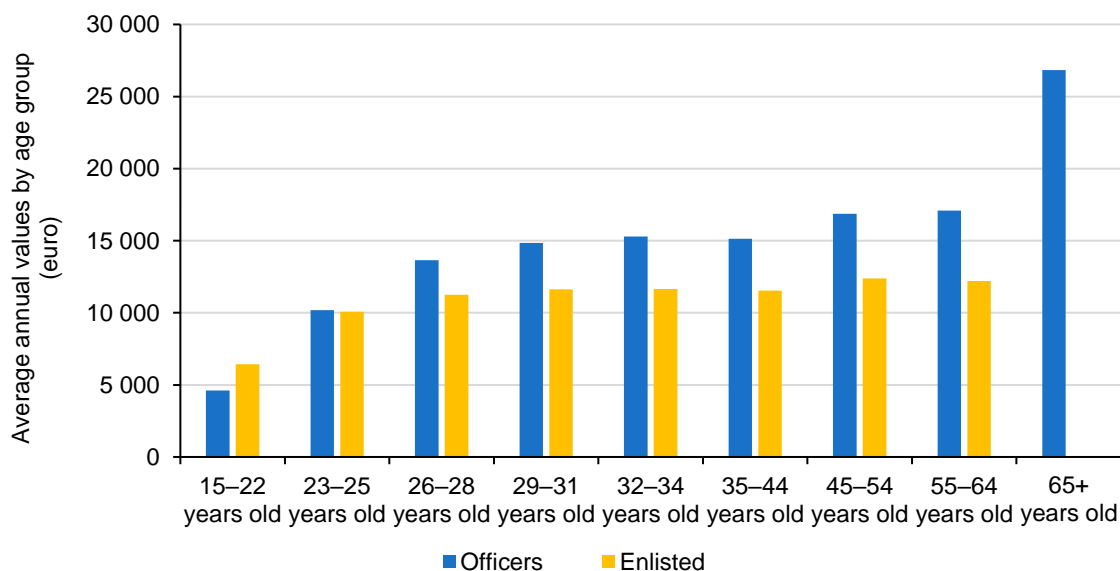


Figure 4.14 Average annual amounts of coverage of commuting and housing expenditures, by age groups, for officers and enlisted, per employee/recipient, in euro. Source: The ADOD.

The three housing and commuting schemes with the largest yearly expenditures are the 1) Service Residences, 2) Defence Rental Allowance, and 3) Defence Home Ownership Assistance Scheme (DHOAS). The purposes of these top three incentives are to improve recruitment, increase retention rates, induce more effort, provide for satisfactory completion of employees' careers, and incentivize deployment abroad. The ADOD considers all three as satisfactory in achieving these purposes. None of the three top incentives have been reformed in the past five years.

Service Residences are the primary form of housing offered to ADF personnel and their families. Defence Housing Australia maintains a contract to provide ADF members with suitable housing assistance. These properties are located in proximity to ADF bases and offices throughout Australia and are, in general, given to members who have families. Members are required to pay a contribution for the use of a service residence; however, it is heavily subsidized, usually at 50 percent of the market rent. The contribution varies according to the member's rank/salary, as well as the standard of house provided.

Defence Rental Allowances are a support allowance for military employees that are required to rent a property. If a service residence is unavailable in the posting locality, a military employee will be eligible for a rental allowance to lease a property in the private rental market. The value of the rental allowance is equivalent to the private rental rate minus the contribution the member would have paid had they been given a service residence.

The DHOAS helps military employees buy and live in their own homes. The scheme pays a monthly subsidy on the member's home loan interest. To access the scheme, a member must first complete a specific period of service, a minimum of 4 years. To be eligible, a member must have a home loan through a declared loan provider. They must also meet various other conditions, such as full ownership. Also, the property must be in the location the member is posted to, and the member is required to occupy the property for a minimum of 12 months. The longer the personnel serve in the ADF, the more entitlement the person accrues under the DHOAS, and the longer they can receive assistance. The subsidy tiers and the corresponding requirements and values are shown in Table 4.5.

Table 4.5 Overview of the DHOAS tiers, requirements, and subsidy loan amount and value, in euro.

Tier	Minimum Permanent service	Minimum Reserve service	Subsidized loan amount	Maximum monthly subsidy*
1	4 years	8 years	243,226	Up to 229
2	8 years	12 years	364,838	Up to 343
3	12 years	16 years	486,452	Up to 457

Source: <https://www.dhoas.gov.au/>.

4.1.5.11 Provision of civilian education

The ADF offers several education schemes for current and future employees. The ADOD reports that there are 19 schemes for this compensation category and assesses the system as complex.

The top three incentives within the provision of civilian education are listed as the 1) Australian Defence Force Academy (ADFA), 2) Defence University Sponsorship (entry), and 3) ADFA Post-Graduate. Schemes at entry level and post-graduate level at the Australian Defence Force Academy are available for students that combine military education and training with academic study. Officer entrants will undertake their three-year program and then have an obligation to serve the ADF for a period of time commensurate with the length and type of degree they complete.

Like academic courses at the ADFA, the largest education schemes for military personnel are designed for the recruitment and retention of the competent needed in the ADF. Two of the three largest educational schemes are intended to ensure for military-specific competences at the ADFA.

Eligible recruits can also apply for a Defence University Sponsorship at their choice of university if the degree is relevant to military postings. The ADF pays the fees, and recipients earn a salary while they complete their degrees. This avenue of entry is primarily available for those tasks and relevant degrees not offered at the ADFA, including those for medical officers, dental officers, and some engineering roles. The students must commit to full-time service for the number of years of university sponsorship plus one additional year.¹³

4.2 Denmark

4.2.1 Executive summary

Danish defense expenditures were 4.3 billion euro in 2020, representing 1.37 percent of GDP. This is a relatively low share – ninth among the twelve countries studied in this report. The personnel expenditures accounted for 46.1 percent of the total expenditures, which is a relatively high share among the studied countries, ranking fourth. The military workforce is around 15,000 personnel. Close to 60 percent of the military workforce work in the Army. Officers account for 23 percent and other ranks account for 77 percent of the military workforce. The demographics of the military workforce is close to the median in the selection, as 49 percent are less than 35 years old. This is eight in the selection of countries. Denmark has a monetary incentive system, in which base salary constitutes 69 percent of the total personnel expenditures while fixed supplements and irregular supplements make up most of the remaining personnel expenditures. The share of base salary is seventh out of the nine countries that provided numbers for base salary. The increase in base salary by age is relatively flat for officers and equal for other ranks. Denmark has the second largest emphasis on fixed supplements. The fixed supplements payments increase by age. Denmark has the fourth largest emphasis on irregular supplements. The value of fixed

¹³ With a minimum of three years of service.

supplements increases by age for officers and other ranks. Denmark has very few schemes per compensation category. The overall impression is that Denmark finds the monetary incentive system to be simple or not complex.

4.2.2 Introduction

Denmark is a peninsula located in Northern Europe. Denmark is the smallest and southernmost country in Scandinavia with a size of 42,920 km². In the world, Denmark ranks as the 131st largest country in the world by area. Denmark shares borders with Germany, and is otherwise surrounded by shoreline. No place in Denmark is farther away than 50 km from the sea. The population of Denmark is 5.8 million, ranking as 113th in the world by population. The population density is 146 per km². In Denmark, 20.2 percent of the population ages 65 and above, which is the 18th highest share in the world.

Denmark's GDP was 312.5 billion euro (2,330 billion DKK) in 2020, ranking the 35th in the world. The GDP per capita was 53,592 euro (399,486 DKK), ranking tenth in the world. Denmark is ranked as the 23rd most complex economy, which is as complex as expected for its income level.¹⁴ The biggest industries in Denmark are agriculture, tourism, energy and transportation.¹⁵ The employment rate is 74.4 percent, which is 8.4 percentage points higher than the OECD average.

NATO has been a cornerstone of Danish defense and security policy since 1949. As a founding member of NATO, Denmark has a long history with the alliance. More than 60,000 Danish personnel have served abroad in UN and NATO missions or in international coalitions. Currently there are Danish soldiers deployed in several different places around the world to perform peace-building, peacekeeping and stabilizing tasks (Danish Defence 2022).

According to the Danish Defence Intelligence Service, Denmark is facing more complex security threats than previously. The main areas that present the biggest threats to Denmark are cybercrime, global terrorism, tensions in the Arctic, and issues relating to Russia and China (Forsvarets Efterretningstjeneste 2021).

The Danish Armed Forces (DAF) maintain the sovereignty of Denmark, the Faroe Island and Greenland. DAF consists of four branches: The Army (*Hæren*), The Royal Danish Navy (*Søværnet*), The Royal Danish Air Force (*Flyvevåbnet*), and the Home Guard (*Hjemmeværnet*). In addition, DAF includes the Defence Command (*Forsvarskommando*), The Royal Danish Defence College (*Forsvarsakademiet*), The Defence Medical Command (*Forsvarets Sanitetskommando*), The Defence Maintenance Service (*Forsvarets Vedligeholdelses-tjeneste*), and the Defence Intelligence Service (*Forsvarets Efterretningstjeneste*). Denmark does not have a specific coast guard entity, as the Royal Danish Navy is responsible for the services that would normally fall to the coast guard.

¹⁴ <https://atlas.cid.harvard.edu/countries/64>

¹⁵ <https://www.worldatlas.com/articles/what-are-the-biggest-industries-in-denmark.html>

4.2.3 Defense expenditures

The Danish defense expenditures for 2020 were 4.29 billion euro (31.96 billion DKK). This represents 1.37 percent of GDP in 2020. This share has been growing the last five years, up from 1.11 in 2015. In absolute numbers, Denmark had the 39th highest military spending in the world in 2020.

Figure 4.15 shows the distribution of types of defense expenditures. Personnel expenditures are the largest component in the Danish defense expenditures making up 46.1 percent. The other half of the expenditures is devoted to equipment (17.7 percent), infrastructure (1.6 percent), and other expenditures (34.4 percent).

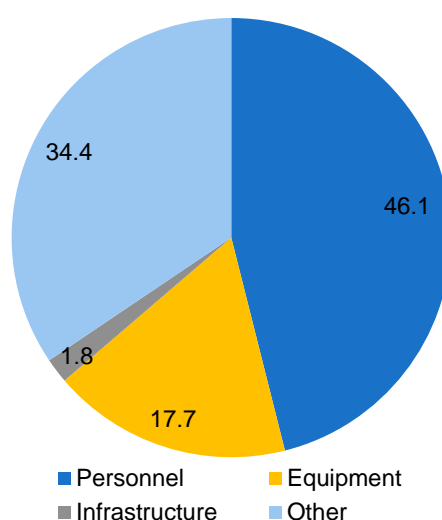


Figure 4.15 Distribution of defense expenditures, in percent. Source: NATO.

Figure 4.16 shows the distribution of monetary personnel expenses by compensation category. Base salary is by far the largest part of personnel expenditures, at 61.2 percent. The remaining 38.8 percent is split between fixed supplements, irregular supplements, one-time bonuses, deployment-related payments, and pension earnings. Fixed supplements is the second largest compensation category, at nearly 17 percent of total payment to personnel. Irregular supplements, pension earnings, and one-time bonuses make up 8.3, 11.7, and 1.1 percent, respectively, of total personnel expenditures, while 1.0 percent of the expenditures is devoted to deployment-related payments.

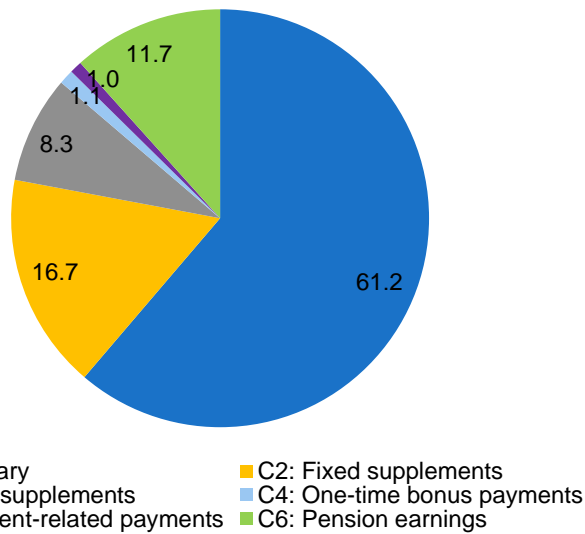


Figure 4.16 Distribution of personnel expenditures by compensation category, in percent.
Source: The DMOD.

4.2.4 The personnel situation

There are in total 30,682 personnel in DAF. DAF consists of 3,341 officers, 11,843 other ranks, 4,933 civilians, 7,134 conscripts, and 3,343 reservists. Additionally, there are 44,159 volunteers in the Home Guard.

In Figure 4.17, the number of military personnel in each branch is shown, both officers and other ranks. The Army, the Navy, and the Air Force have 8,805, 2,858, and 3,375 military personnel, respectively. In addition, the Home Guard consists of 1,099 officers and 43,060 other ranks.

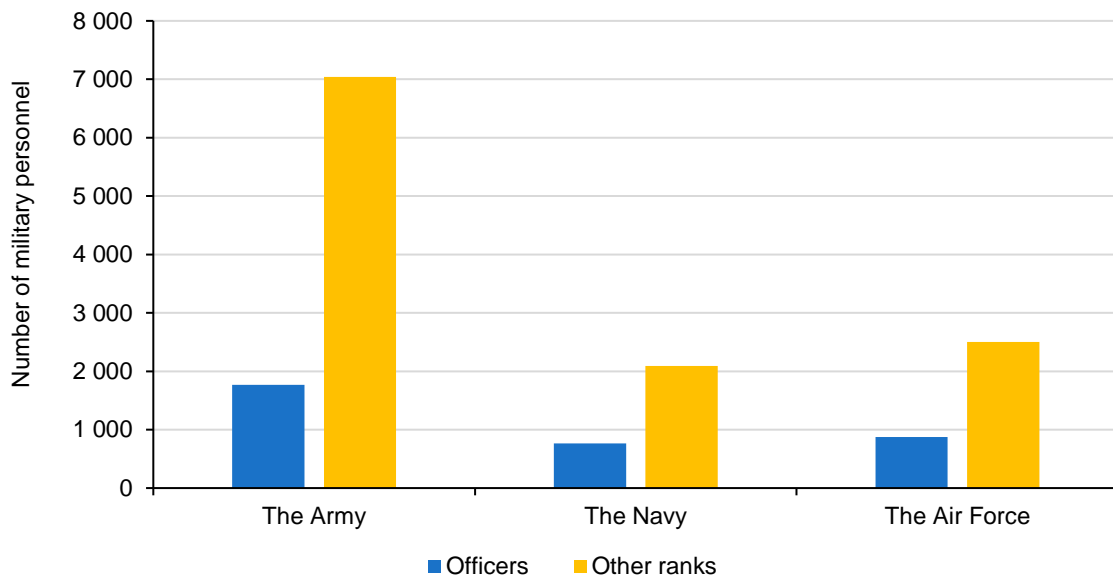


Figure 4.17 Number of military personnel, by branch, officers and other ranks. Source: The DMOD.

Figure 4.18 shows the distribution of officers by branch. The Army employs 51.9 percent of the officers, and the Navy and the Air Force employ 22.5 and 25.7 percent, respectively. The share of military personnel in the Home Guard is not included in these figures. The distribution differs from the other branches. In the Home Guard, officers account for two percent of the military personnel, while other ranks account for 98 percent. This means that nearly 80 percent of the other ranks in DAF work in the Home Guard.

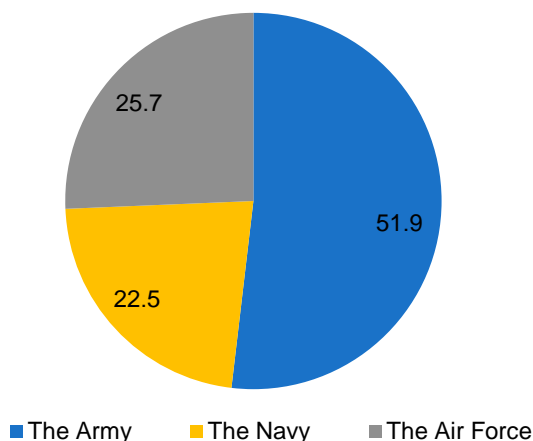


Figure 4.18 Share of officers by branch, in percent. Source: The DMOD.

Figure 4.19 shows the distribution of other ranks by branch. The Army employs 60.5 percent of the other ranks, and the Navy and the Air Force employ 18.0 and 21.5 percent, respectively.

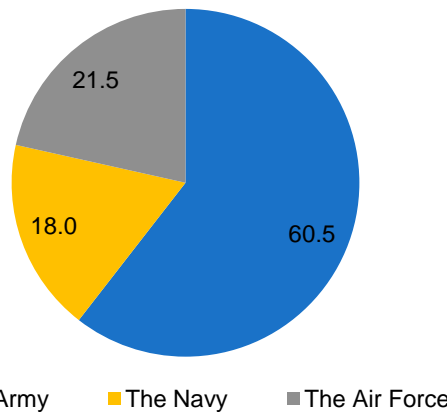


Figure 4.19 Share of other ranks by branch, in percent. Source: The DMOD.

Figure 4.20 shows the overall age distribution of officers, other ranks and civilians. The officers have an age structure where 29 percent are under 35 years old, and 45 percent are over 44 years old. Among other ranks, 55 percent are under 35 years old, and 29 percent are over 44 years old. The civilians have an age structure where 20 percent are under 35 years old, and 60 percent are over 44 years old.

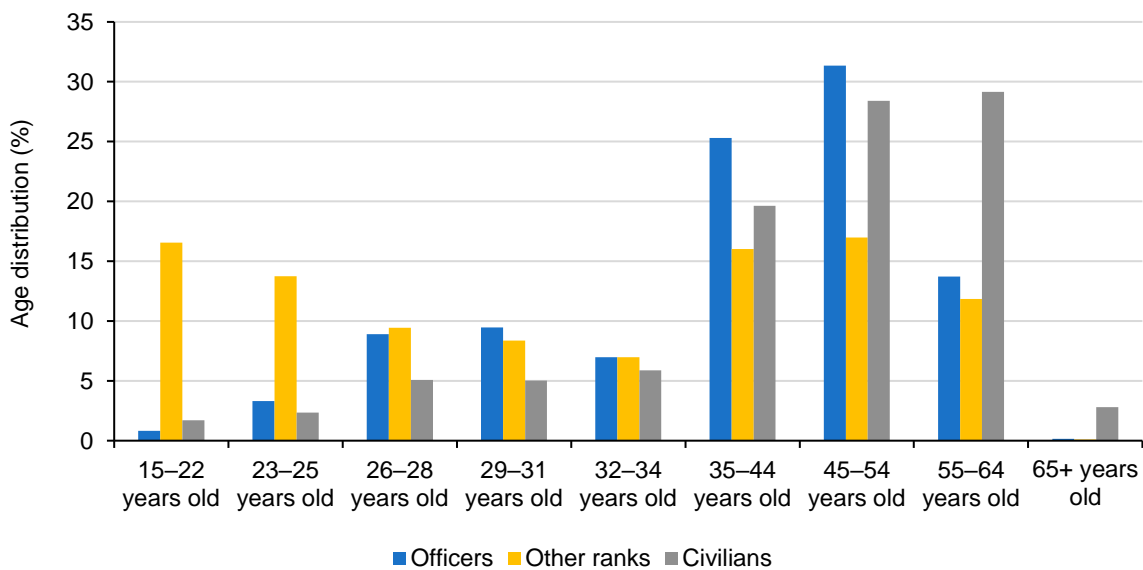


Figure 4.20 The age distribution among the officers, other ranks, and civilians, in percent (each employee group sums up to 100 percent). Source: The DMOD.

Reservists are not distributed by age in the current system. The reservists in DAF get a fixed payment based on the number of days they are training. They do not get compensation for the difference between the reservists’ civilian pay and the service pay, nor other benefits normally provided by the civilian employer. The civilian employers do not get compensation for the loss of working hours of the employee while the employee is in service/training.

More than 60,000 Danish personnel have served abroad in UN and NATO missions or in international coalitions. Currently there are Danish soldiers deployed in several different places around the world to perform peace-building, peacekeeping and stabilizing tasks. In 2020, 860 military personnel took part in international operations.

4.2.5 Compensation categories

4.2.5.1 Data description

The Ministry of Defence Personnel Agency (DMDPA) received the responsibility to complete the survey on behalf of the DMOD. Denmark provided monthly figures per recipient for all compensation categories except one-time bonus payments. For one-time bonus payments the figures are annual per recipient. Part-time employees are also included in the figures. Denmark provides the number of schemes and complexity assessment for fixed supplements, one-time bonuses and pension earnings. Additionally, the number of schemes for irregular supplements is provided. Denmark provides the top three incentives of irregular supplements, the top two incentives of fixed supplements and pension earnings, and the top incentive of one-time bonuses. They do not provide the satisfaction level of the incentives and whether they have been reformed.

4.2.5.2 Base salary

The base salary constitutes 61.2 percent of DAF's personnel expenditures. In Denmark, collective bargaining agreements mainly determine wage setting, and the public sector follows the wage formation negotiated in the private sector. In general, therefore, all employees in DAF achieve a certain raise based on the national economy and the negotiations between the DMDPA and the trade unions. In Denmark, collective bargaining negotiations for DAF are delegated from the Ministry of Finance to the DMDPA.

Base salary is also tied to rank, seniority, and employment type. Climbing the military rank hierarchy translates into higher base salary. High-performing individuals can be expected to climb up the rank system more quickly.

Figure 4.21 shows the average monthly base salary by age groups for officers and other ranks. Officers earn on average higher base salary than other ranks. The steepness of the increasing base salary by age is also higher for officers. There is not a similar progress for other ranks by age groups. In fact, the monthly pay is on average around 3,000 euro (22,000–23,000 DKK) for other ranks from the 32–34 to the 55–64 age groups. The figure includes all employees, not only full-time employees.

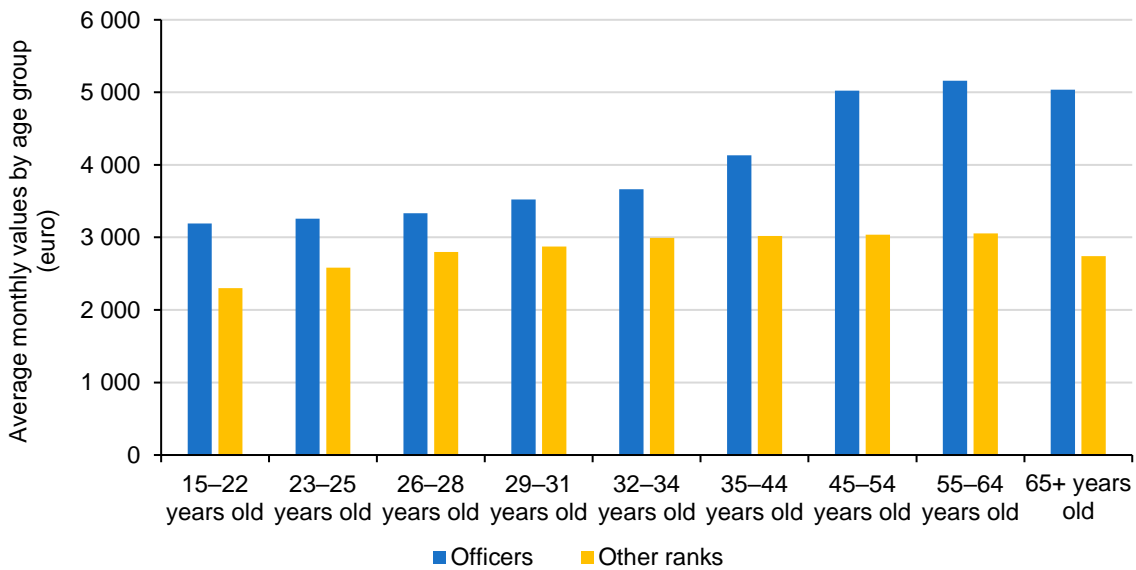


Figure 4.21 Average monthly base salary for officers and other ranks, by age group, per employee, in euro. Source: The DMDPA.

4.2.5.3 Fixed supplements

The fixed supplements monetary incentive system constitutes 1.1 percent of DAF's personnel expenditures. DAF has two schemes for fixed supplements. The DMDPA characterizes the system of fixed supplements as simple.

Figure 4.22 presents the fixed supplement distributed by age group for officers and other ranks per month. The numbers are for receivers only. The figure shows that the amount on average increases with age for both officers and other ranks, but the increase is much steeper for officers.

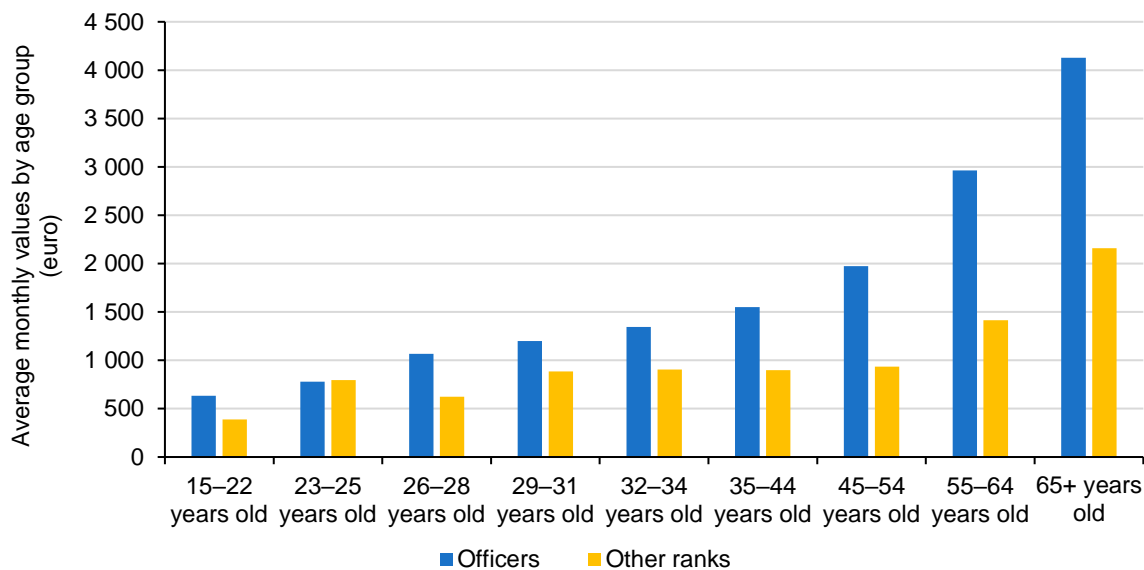


Figure 4.22 Average monthly fixed supplements for officers and other ranks, by age group, per recipient, in euro. Source: The DMDPA.

The two schemes for fixed supplements are: 1) Qualification Allowance (Kvalifikationstillæg), and 2) Pre-Arranged Allowances (Forhåndsftalte tillæg). The main purposes of the Qualification Allowance are to improve recruitment, increase retention rates, and induce more effort. The main purpose of the Pre-Arranged Allowances is to increase retention rates. The DMDPA did not answer whether they are satisfied with these fixed supplements' ability to achieve the purposes, and whether the schemes have been reformed the past five years.

4.2.5.4 Irregular supplements

The irregular supplements monetary incentive system constitutes 8.3 percent of DAF's personnel expenditures. There are three schemes for irregular supplements. The DMPDA provides no assessment of the complexity of the system of this compensation category.

Figure 4.23 shows the distribution of irregular supplements by age group for officers and other ranks per month. The numbers are per receiver. As for fixed supplements, the amount of irregular supplements is higher for older age groups on average than for younger age groups. In contrast to fixed supplements, however, irregular supplements are on average similar between officers and other ranks.

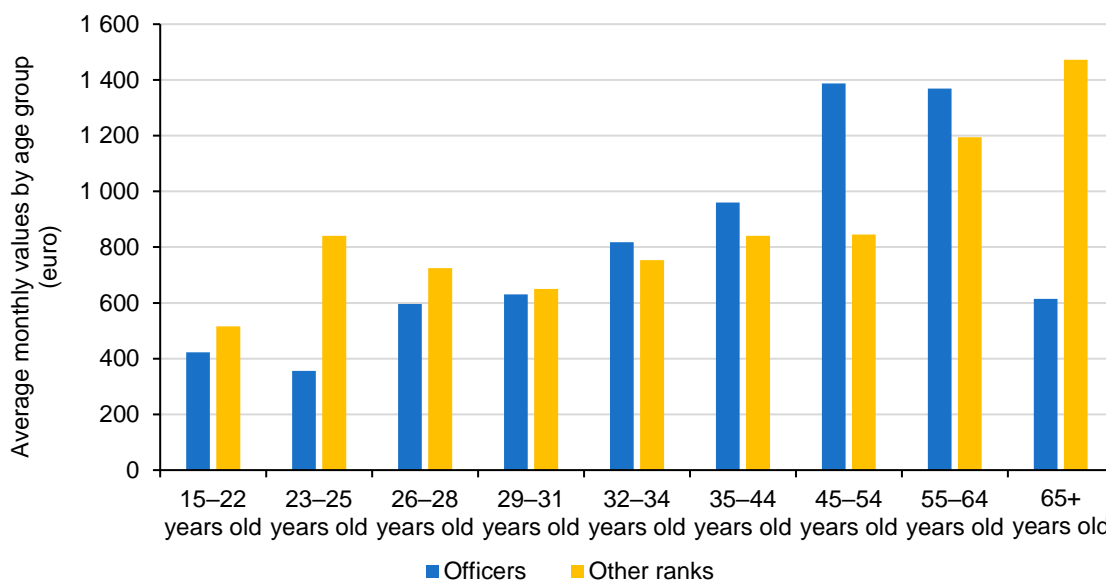


Figure 4.23 Average monthly irregular supplements for officers and other ranks, by age group, per recipient, in euro. Source: The DMDPA.

The three schemes for irregular supplements are: 1) Additional Pay (genetillæg), 2) Overtime Pay (over-/merarbejde udbetaling), and 3) Other Variables (andre variable). The main purposes of the schemes are to increase retention rates and induce more effort. We have no information on satisfaction and reforms.

4.2.5.5 One-time bonus payments

The one-time bonus monetary incentive system constitutes 1.1 percent of DAF's personnel expenditures. DAF has one scheme of the one-time bonus compensation category. The DMDPA characterizes this bonus scheme as simple.

Figure 4.24 shows the amount of one-time bonus per recipient in 2020. The average amount for officers differs by age group. The 35-44, 45-54, and 55-64 age groups receive, on average, the largest amounts. The value of the bonus does not change much, on average, between age groups for other ranks.

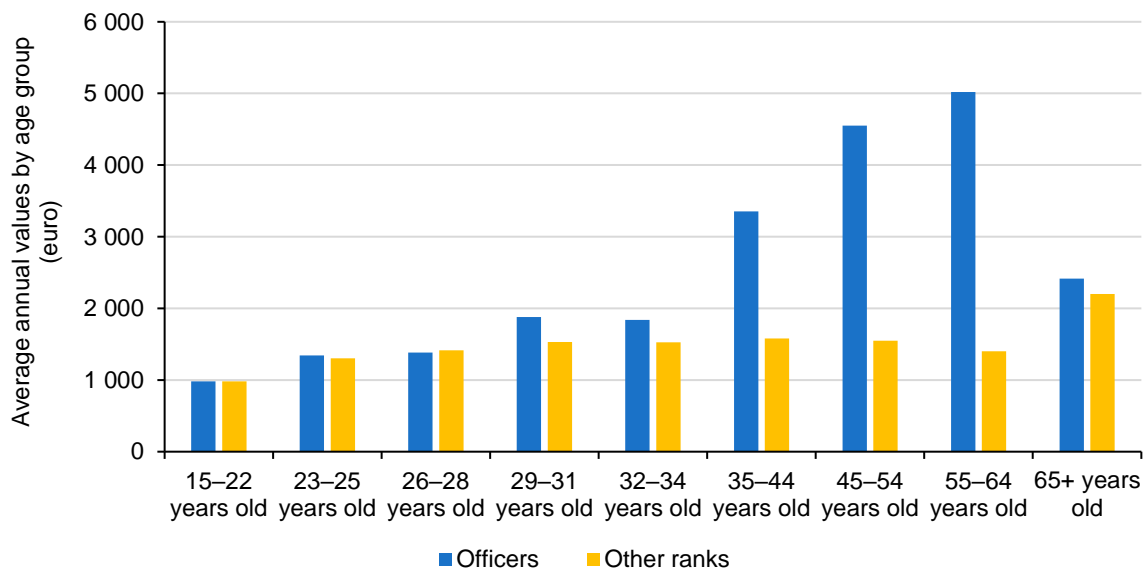


Figure 4.24 Average annual one-time bonuses per recipient, for officers and other ranks, by age group, per recipient, in euro. Source: The DMDPA.

DAF offers one one-time bonus scheme: 1) One-Time Payment (*engangsvederlag*). The DMDPA reports that at the end of each year, every employee negotiates with his/her employer about extra regular pay or a bonus for performance on supplementary work. The purposes of this scheme are to increase retention rates, and induce more effort. We have no information on DMDPA's satisfaction with the one-time bonus scheme or any reforms the past five years.

4.2.5.6 Deployment-related payments

The deployment-related payments monetary incentive system constitutes 1.0 percent of DAF's personnel expenditures. DAF offers several schemes for deployment-related payments, but we do not have information about the exact number. As a part of the current collective bargaining agreement, the DMDPA reports that they are looking at changing how service in international operations is rewarded. The purpose is to incentivize deployment abroad. Whether it will involve one-time bonus payments is not decided at this time.

We have no information about the top three deployment-related payments.

4.2.5.7 Pension earnings

Pension earnings make up 11.7 percent of all personnel expenditures in DAF. The military pension system in Denmark is based on earlier retirement than the general public for the reason of operational capabilities. As of 2020, the general retirement age in Denmark is 66 years old. The age of general retirement is rising steadily, but is not fully implemented for all citizens yet. For instance, the retirement age is 68 years old for people born between 1963 and 1966. For citizens born in 1967 and later, the age of retirement is not known as the necessary legislation has not yet been passed. However, it is expected that the general retirement age will be 72 years by 2050.

For military employees the age of retirement used to be 60. This retirement age is also slowly rising. For military personnel born in 1963 and later, the retirement age is 63. For military employees who joined DAF after 2014–2015, there is no stipulated retirement age. When military employees reach the age of retirement, DAF is not obliged to offer continued service, but the employer can offer, at the employers’ discretion, continued service. The rules are regulated and formulated by the DMDPA. There are two options: An extension of the current contract, or the negotiation of an individual contract. The last option is used in a limited manner, primarily in relation to employees with specialist skills that cannot be replaced. Such an extension is subject to approval by the DMDPA. Depending on the contract, employees earn a percentage of their base and fixed salary in pension.

Figure 4.25 shows the average monthly pension earnings distributed by age for officers and other ranks.

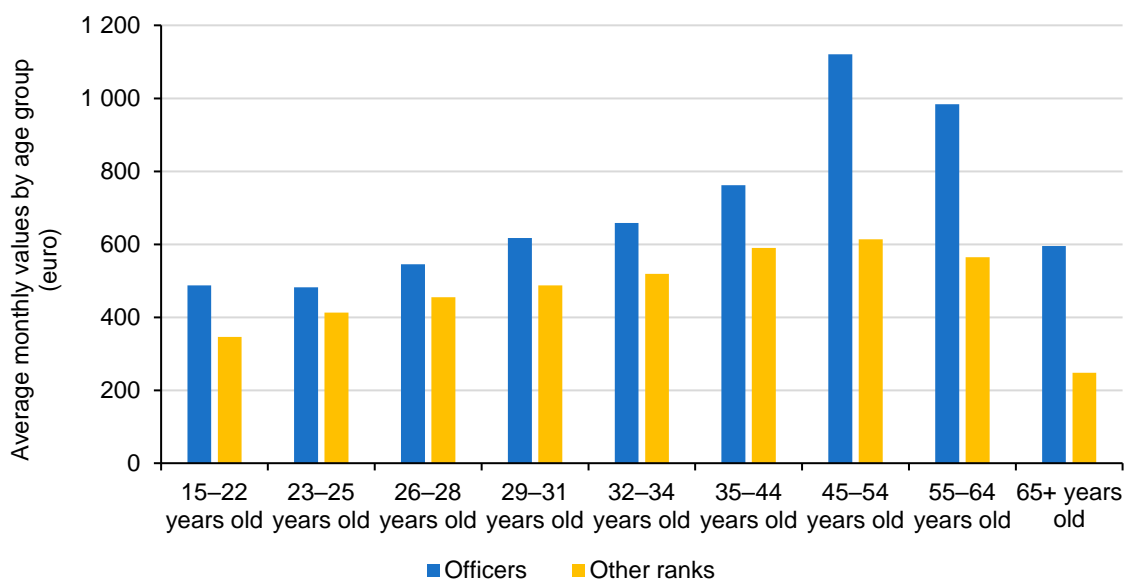


Figure 4.25 Average monthly pension earnings for officers and other ranks, by age group, per recipient, in euro. Source: The DMDPA.

The main purposes of the pension scheme is to improve recruitment, increase retention rates, and provide a satisfactory completion of employees’ careers. DAF has one pension earnings scheme and the DMPDA evaluates the pension scheme as not very complex. The DMDPA has not answered whether they are satisfied with these irregular supplements ability to achieve the purposes, or whether the schemes have been reformed the past five years.

4.2.5.8 Tax exemptions

Special tax exemptions for military personnel are not used in Denmark.

4.2.5.9 Welfare services and payments

Special welfare services and payments for military personnel are not used in Denmark.

4.2.5.10 Coverage of commuting and housing expenditures

The DMDPA has not been able to provide information about the top three coverage of commuting and housing expenditures. However, DMDPA points out that DAF uses similar schemes as in Norway in relation to relocation of personnel (housing rental cost compensation for commuters, housing rental cost compensation supplement for commuters, and relocation bonus).

4.2.5.11 Provision of civilian education

There are no official civilian education schemes in DAF. An employee can arrange with the employer to cover the tuition course, etc. if this person wants to pursue, for instance, a course or degree at a university. However, the employer is not obliged to accept the employees' aspirations.

4.3 Finland

4.3.1 Executive summary

Finnish defense expenditures were 3.6 billion euro in 2020, representing 1.53 percent of GDP. This is around the median – sixth among the twelve countries studied in this report. The personnel expenditures accounted for 28.0 percent of total expenditures, which is the lowest share among the twelve countries. The military workforce is close to 7,800 personnel. Forty-five percent of the military workforce work in the Army. Officers account for 66 percent and other ranks account for 34 percent of the military workforce. The demographics of the military workforce is the youngest in the selection. Sixty-six percent are less than 35 years old. Finland has a monetary incentive system, in which base salary constitutes 83 percent of total personnel expenditures while irregular supplements and deployment-related payments make up most of the remaining expenditures. The share of base salary is the second highest among the twelve countries. Finland has the most equal distribution of base salary for officers and the second most equal distribution for other ranks.

4.3.2 Introduction

Finland is a republic situated in the northern part of Europe between Russia, the Baltic Sea, Sweden, and Norway. Finland has a population of 5.5 million and the country measures 338,460 km². Finland ranks as the 66th largest country in the world by area and as the 115th by population. The population is concentrated at the southwestern coast. Finland shares a 1,309 km long eastern border with Russia, a northern border with Norway, and a northwestern border with Sweden. The coastline to the Baltic Sea stretches 1,250 km. Finland also has access to the Gulf of Bothnia and the Gulf of Finland. The population density is 18.2 per km². In Finland, 22.6 percent of the population is 65 years and older. This is the fourth highest share in the world.

Finland is the 42nd largest economy in the world, with a GDP of 238 billion euro in 2020. The GDP per capita was 43,041 euro (2020), ranking 18th in the world. Finland is ranked as the 13th most complex economy in the world. Finland's economy is highly industrialized with exports in manufacturing, telecommunication, electronics and agriculture. The employment level is 71.2 percent, 5.2 percentage points higher than the OECD average.

The security situation in Finland remained stable for decades after the Cold War, but experienced a sharp turn with Russia's invasion of Ukraine in February 2022. While neutrality was a long-standing security policy during and after the Cold War, Finland has now applied for NATO membership. Prior to the NATO application, Finland was a NATO partner and contributor to NATO-led operations. Finland has been one of six countries that make particularly significant contributions to NATO operations and other Alliance objectives, known as 'Enhanced Opportunity Partners' under the Partnership Interoperability Initiative.¹⁶ As of 2021, Finnish military personnel participate in crisis management in Iraq, Somalia, Kosovo, Lebanon, and Mali.¹⁷ Finland also has a long tradition of peacekeeping, and has already had over 57 000 peacekeepers in peacekeeping duties.¹⁸

In the National Security Overview 2022, the Finnish Security and Intelligence service considers foreign intelligence and influence operations and terrorism as the main threats to Finland security. It states that the most significant threat of intelligence and state-sponsored influence operations come from Russia and China. Future NATO membership for Finland may also attract more attention from Russia.¹⁹

The Finnish Defence Forces (FDF) consist of the Finnish Army (*Maavoimat*), the Finnish Navy (*Merivoimat*), and the Finnish Air Force (*Ilmavoimat*). Finland does not have a designated Coast Guard. Instead, the Finnish Border Guard (*Rajavartiolaitos*) is a multi-mission service that operates on land, at sea, and in the air, with the aim of ensuring Finland's territorial integrity and the safety of the people. FBG is operating under the Finnish Ministry of the Interior.

4.3.3 Defense expenditures

The Finnish defense expenditures were 3,586 million euro in 2020. This makes up 1.53 percent of GDP in Finland. While the defense expenditures hovered around 1.3 and 1.5 percent of GDP in the decade from 2011 to 2020, the most recent defense expenditures have sharply increased as a share of GDP. In 2021 and 2022, the defense expenditures have been over 2 percent of GDP. The main component of this increase is the purchase of the F-35 jet fighter from Lockheed Martin. In absolute numbers, Finland had the 44th highest military spending in the world in 2020.

The FMOD reports that the payroll of the FDF and personnel costs for the military crisis management (covered by the Ministry of Foreign Affairs) were 850 million euro.²⁰ The total defense spending including VAT reported by the FMOD was 3,032 million euro.²¹ The share of the defense expenditures spent on personnel was 28.0 percent. This is shown in Figure 4.26. The figure also shows that equipment constitutes 18.8 percent (this share increases much in 2021 and 2022), infrastructure constitutes 8.6 percent, and other expenditures constitute 44.5 percent.

¹⁶ https://www.nato.int/cps/en/natohq/topics_49594.html.

¹⁷ <https://puolustusvoimat.fi/en/international-activities/international-crisis-management>

¹⁸ [Conscript 2022 – A guide for getting prepared for military service \(intti.fi\)](https://www.intti.fi/en/conscript-2022).

¹⁹ <https://supo.fi/en/national-security-overview>

²⁰ https://www.defmin.fi/files/5211/TAE_2022_spending_27.9.2021.pdf.

²¹ https://www.defmin.fi/files/5211/TAE_2022_spending_27.9.2021.pdf.

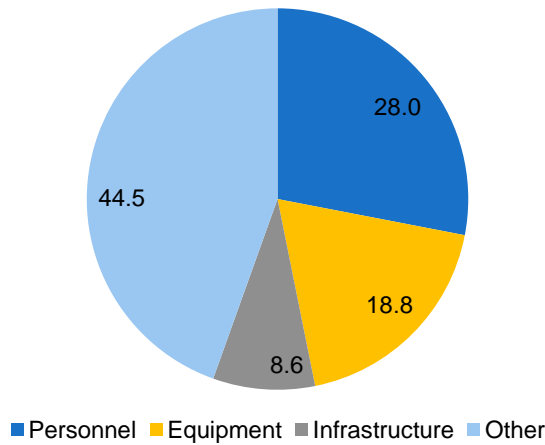


Figure 4.26 *Distribution of defense expenditures, in percent.* Source: https://www.defmin.fi/files/5211/TAE_2022_spending_27.9.2021.pdf.

The FMOD reports only expenditures on two compensation categories, namely base salary and irregular supplements. These are the compensation categories with the largest documented expenditures. Additionally, FMOD reports some of the fixed supplements, but not the total amount. There are, however, descriptions of other schemes of monetary incentives in the other compensation categories. We have added information about the personnel costs for the military crisis management as deployment-related payments, and information on the rent subsidy from the survey as commuting and housing expenses. Therefore, Figure 4.27 lacks information on other types of compensation categories, and may underestimate the magnitude of deployment-related payments and the coverage of commuting and housing expenses. Additionally, the fixed supplements are underestimated because the FMOD only reports some of the fixed supplements. The figure shows that base salary constitutes 82.9 percent and that fixed supplements, irregular supplements, deployment-related payments, and the coverage of commuting and housing expenses constitute 0.3, 10.2, 6.5, and 0.2 percent, respectively.

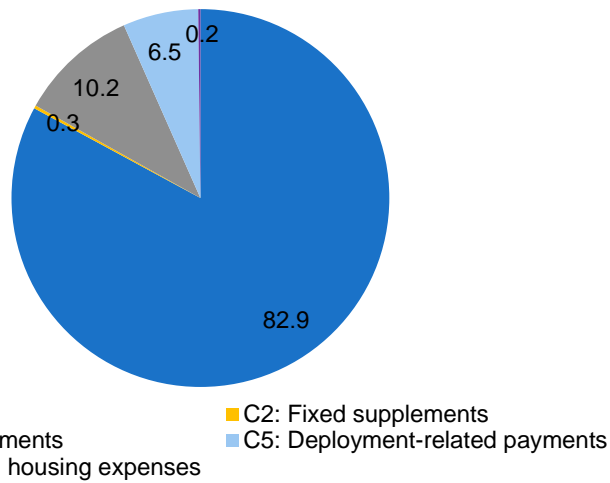


Figure 4.27 Distribution of compensation categories in the Finnish expenditures on personnel. Source: The FMOD.

4.3.4 The personnel situation

There were 5,125 officers, 2,640 other ranks, and 4,066 civilians in the FDF in 2020. Finland also has compulsory conscription. Annually 21,000 conscripts are provided military training.²² In addition, the FDF has a reserve force of approximately 900,000 Finnish citizens. Its wartime strength is 280,000 soldiers.²³ Notice that the FDF has a relatively low number of other ranks compared to other countries. The reason is related to the importance of conscription and reservists in the defense of Finland.

In Figure 4.28, the number of military personnel by branch is shown. The Army, the Navy, and the Air Force have 3,480, 1,160, and 1,545 military personnel, respectively. In addition, there are 1,580 military personnel in other defense institutions within the FDF.

²² <https://intti.fi/en/web/intti/in-service>

²³ <https://intti.fi/en/in-the-reserve>

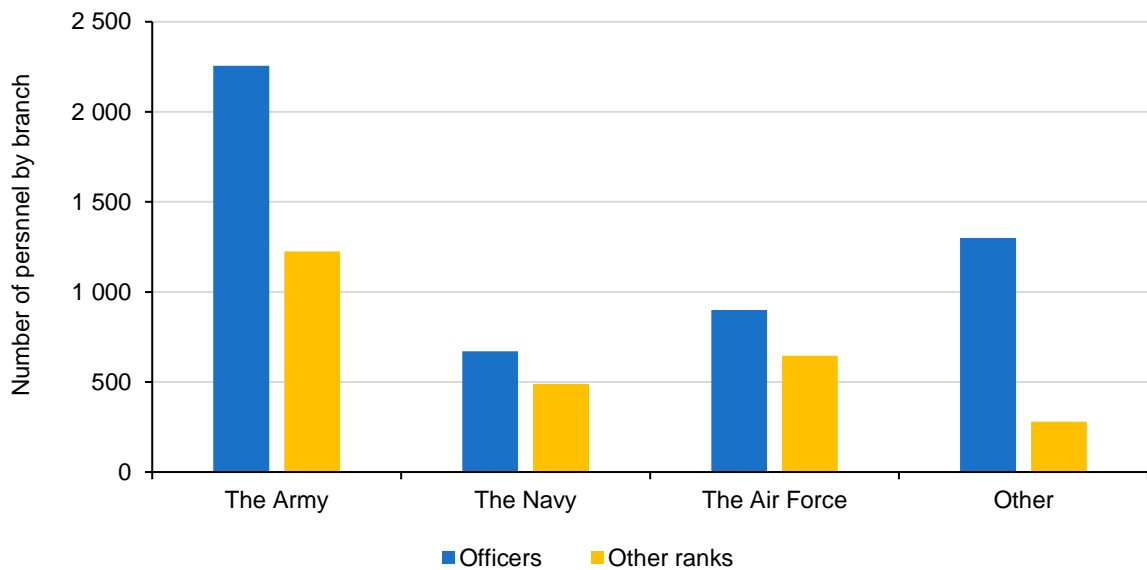


Figure 4.28 Number of military personnel, by branch and defense institutions, officers and other ranks. Source: The FMOD.

In Figure 4.29, the shares of officers by branch and other institutions are shown. Forty-four percent of the officers are employed in the Army, and 13.1 and 17.6 percent in the Navy and the Air Force, respectively. In addition, 25.4 percent of the officers are working in other institutions in the FDF.

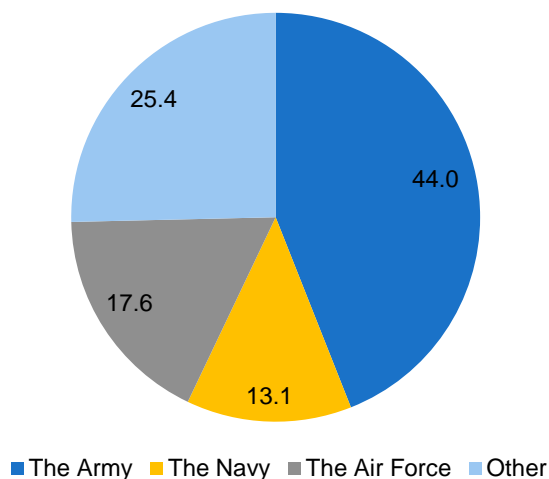


Figure 4.29 Share of officers by branch, in percent. Source: The FMOD.

Figure 4.30 shows the shares of other ranks by branch and other institutions. Around 46 percent of the officers are employed in the Army, and 18.6 and 24.4 percent in the Navy and the Air Force, respectively. In addition, 10.6 percent of the officers are working in other institutions in the FDF.

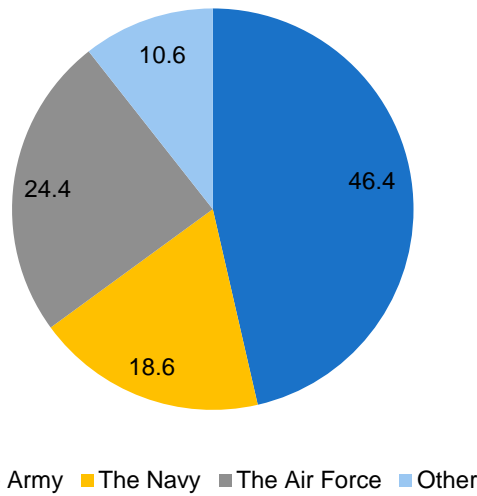


Figure 4.30 Share of other ranks by branch and defense institutions, in percent. Source: The FMOD.

In Figure 4.31, the age distribution among officers, other ranks, and civilians is shown. Among officers, 26 percent are under 35 years old, and 43 percent are over 44 years old. Among other ranks, 51 percent are under 35 years old, and 16 percent are over 44 years old. The civilians have an age structure, in which 11 percent are under 35 years old, and 65 percent are over 44 years old.

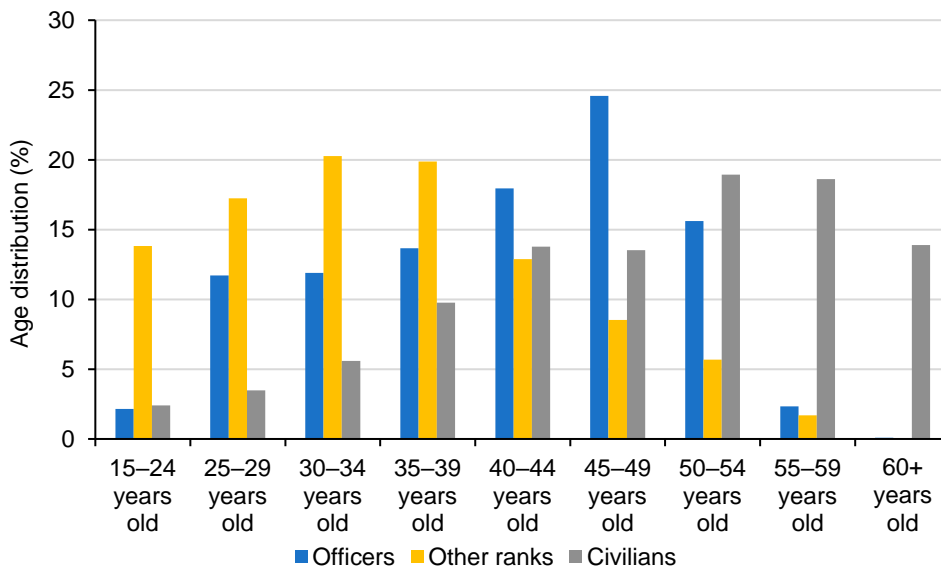


Figure 4.31 The age distribution among officers, other ranks, and civilians, in percent (each employee group sums up to 100 percent). Source: The FMOD.

4.3.5 Compensation categories

4.3.5.1 Data description

Finland provides total monthly figures per age group. We divide the figures by the number of employees in order to get average numbers per employee. The FMOD reports the amount per age group based on other different age groups than suggested in the RFI. Finland provides complexity assessment of irregular supplements, but does not provide the numbers of schemes for any of the compensation categories. They provide the top three incentives of irregular supplements and deployment related payments, and whether these incentives have recently been reformed.

4.3.5.2 Base salary

Base salary constitutes 82.9 percent of Finnish personnel expenditures. In Finland, public wage setting is mainly determined by collective bargaining agreements at a national level and in separate collective agreements. Public sector follows the wage formation negotiated in the private sector. The FMOD negotiates at agency level with the labor unions for a collective agreement regarding wages of the personnel of the FDF. This includes the agreements on wage tables and wage brackets.

The wage tables and wage brackets concerning military personnel are based on an assessment of the complexity of tasks in different positions and placements. The task complexity assessment systems are based on a set of criteria related to the employees' qualifications and properties of the task, like education, work experience, depth of knowledge, responsibilities, and working conditions. There are five different assessment systems to tailor the assessment for various personnel groups. The wage for the highest ranking officers are not a part of the regular wage determination. Wage levels and wage increases for this personnel group are usually determined by position or rank.

Figure 4.32 shows the average monthly base salary for officers and other ranks by age group. The officers have higher base salary than other ranks in all age groups, and the increase is also steeper for officers. The average base salary among other ranks is around 3,000 euro per month for all age groups from 35–39 years old to 55–59 years old.

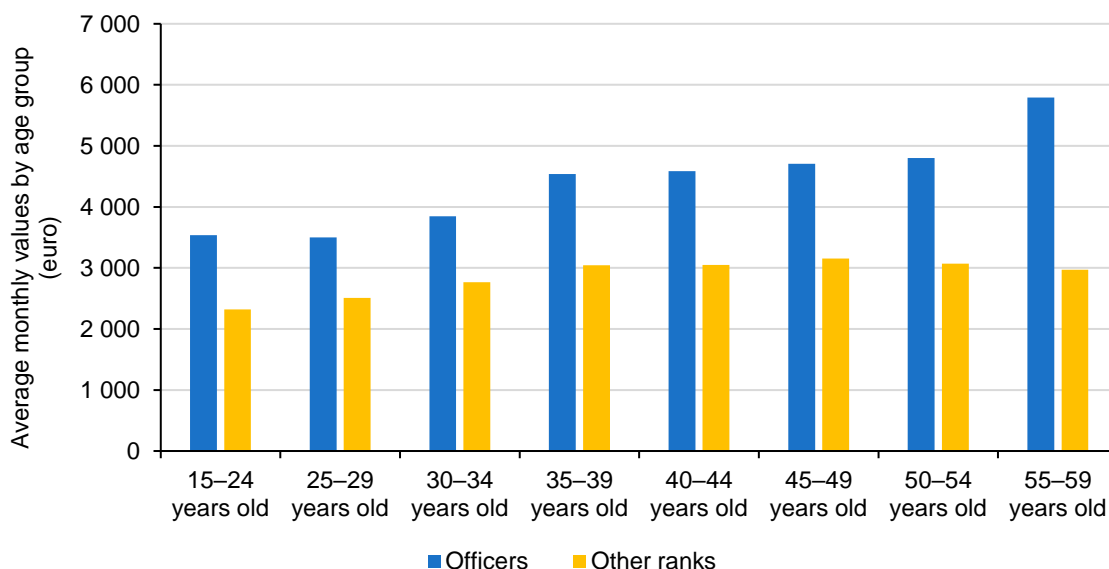


Figure 4.32 Average monthly base salary for officers and other ranks, by age group, per employee, in euro. Source: The FMOD.

4.3.5.3 Fixed supplements

Fixed supplements make up 0.3 percent of Finnish personnel expenditures. The FDF has some schemes for fixed supplements but the specific number is not reported. An assessment of the complexity of this incentive system is not provided either. The FMOD provides the average monthly payments for a few of the schemes but not the total of all fixed supplements. Specifically, the spending of the top incentive and some of the top three incentive is reported. The top incentive is allowances related to military aviation in military positions (instruction supplement, aeronautical supplement and air navigation supplement). The top three incentive is allowances based on separate agreements for maritime service supplements. The total sum per month of these incentives are reported per age group. We divide the amount by the number of officers and other ranks per age group to calculate the average monthly payment per military employee. Note that many of the other countries provide data on the average amount per recipient.

Figure 4.33 shows the monthly average amount of fixed supplements related to military aviation in military positions for officers and other ranks. These supplements are based on collective agreement. Officers in the 20–24 age group receive a substantially higher amount than the other age groups. For other ranks, the amount increases with age.

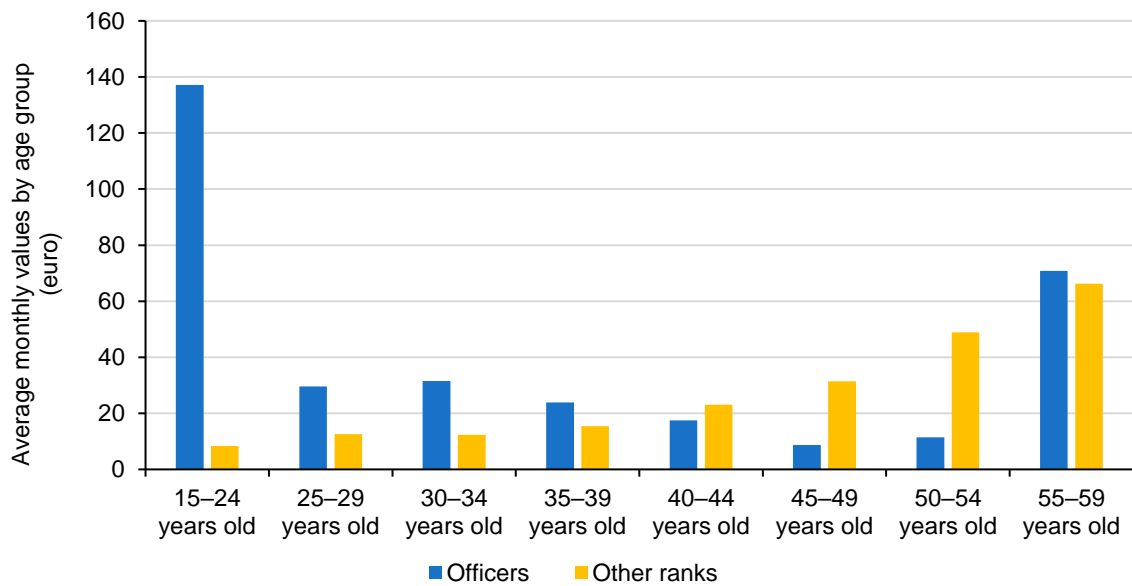


Figure 4.33 Average monthly fixed supplements related to military aviation for officers and other ranks, by age group, per employee, in euro. Source: The FMOD. Note: we do not show numbers for the age group 65+ years old.

Figure 4.34 shows monthly allowances based on separate agreements for maritime service supplements. These supplements are only paid to officers, and the youngest and eldest age group receive the highest amounts.

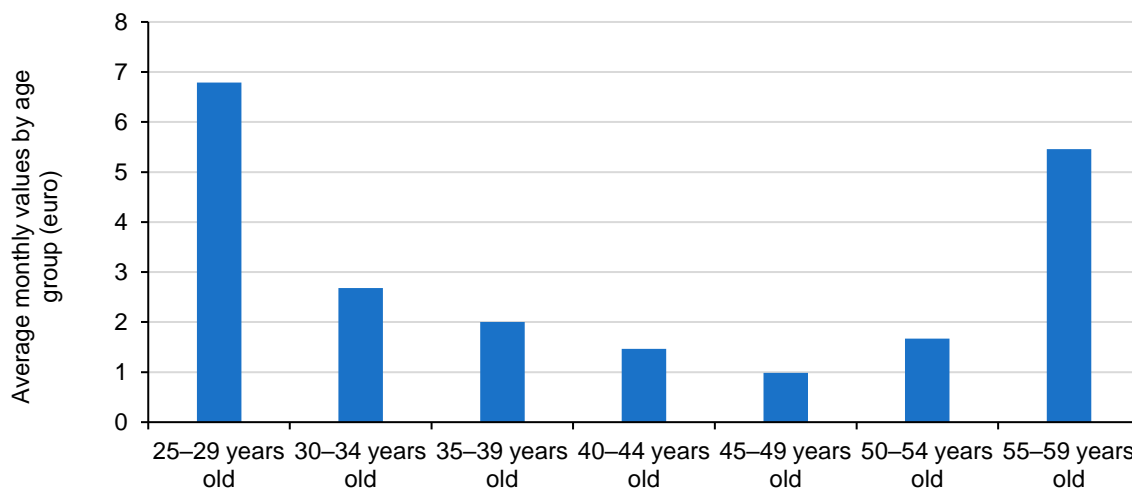


Figure 4.34 Average monthly fixed supplement based on separate agreements for maritime service supplements, for officers, in euro. Source: The FMOD.

The FMOD reports the top three fixed supplements to be: 1) Allowances for Military Aviation, 2) Uniform Allowance, and 3) Individual Allowances. The FMOD does not report what the

purposes of these incentives are, its satisfaction with the incentives, or any reforms of these incentives the past five years.

The FDF offers fixed supplements for certain military aviation tasks. Military personnel can receive Instruction Supplement, Aeronautical Supplement and Air Navigation Supplement. These allowances are based on the responsibility or risk associated with the tasks. The amount of allowances is determined by years of experience (1–5 years, 6–10 years, and more than 10 years). Personnel serving in a military aviation position may sign a service commitment for a 3-years period. This will result in additional payments.

The Uniform Allowance are provided to secure that military personnel have no expenditures on uniforms. The personnel are allowed to order uniforms according to a separately specified schedule. The purchase of uniforms is free of charge for soldiers.

Individual Allowances are fixed supplements offered to some employees based on separate agreements. The aim of these compensations has been to develop the pay system, improve pay equality, and, in part, to attract and recruit personnel in the service of the FDF. Some of these supplements are in place to compensate for special working environments, like Maritime Service Supplement. Other Supplements are implemented in order to recruit and retain personnel with especially sought after competence like Technical and Engineering Allowance.

4.3.5.4 Irregular supplements

Irregular supplements make up 10.2 percent of Finnish personnel expenditures. The FDF has some schemes for irregular supplements but the specific number is not reported. An assessment of the complexity of this incentive system is not provided either. The FMOD reports the total sum of irregular supplements per age group per month. We divide this number by the number of officers and other ranks per age group to calculate the average monthly payment per employee. Note that many of the other countries provide data on the average amount per recipient.

Figure 4.35 shows the monthly average amount of irregular supplements per employee for officers and other ranks. Officers in the 25–44 age groups receive almost the same amounts on average, and receive relatively large amounts. In contrast, officers in the 45–54 age groups receive much less. Also, other ranks in the 25–44 age groups receive substantially smaller amounts than the officers in the same age groups.

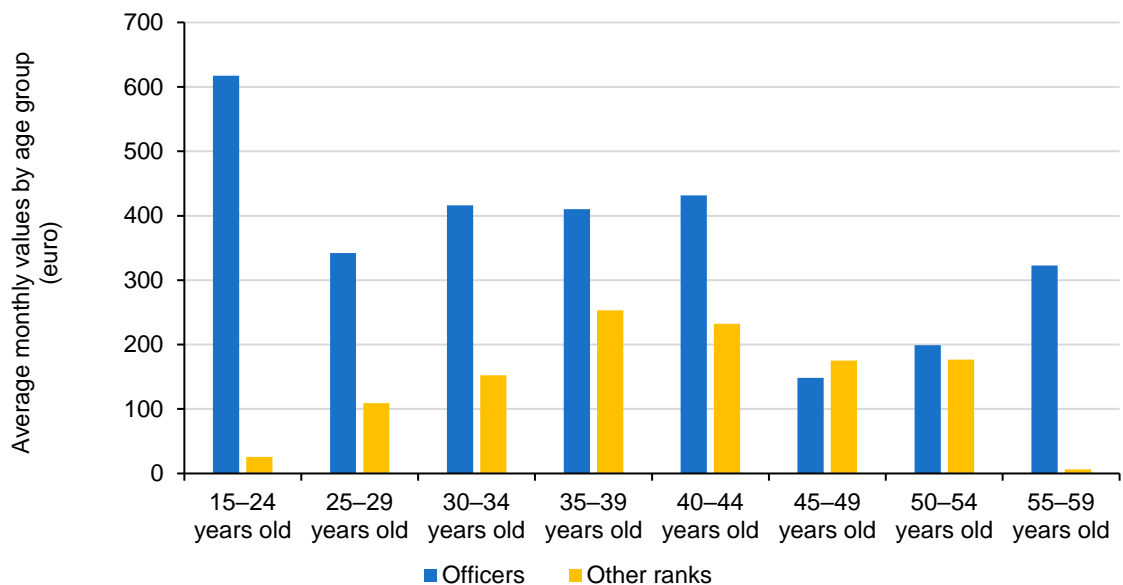


Figure 4.35 Average monthly irregular supplements for officers and other ranks, by age group, per employee, in euro. Source: The FMOD. Note: We do not show numbers for the age group 65+ years old.

In the FDF, the irregular supplements with highest expenditures are the following: 1) Exercise Compensation, 2) Maritime Service Allowance, and 3) Working Time Allowances. The FMOD does not report the purposes of these incentives or its satisfaction in meeting these purposes. However, it reports that none of the top three incentives have been reformed the past five years.

Exercise Compensation is a compensation for participating in military exercises, and consists of Military Exercise Compensation and Daily Allowance. The Military Exercise Compensation is approximately 130 euro and is subject to income tax. The Daily Allowance does not count in the taxable income.

The Maritime Service Allowance is paid to personnel assigned to naval service. The value is approximately 60 euro per day. The total amount of compensation is determined by the sailing time on a Navy vessel. The Maritime Service Allowance is taxable income. In addition to the Maritime Service Allowance, personnel are paid a maritime service allowance for ship service. This allowance is tax-free income.

The FDF pays its military personnel Working Time Allowances as well. The collective agreement on working time in the FDF contains provisions on compensations for unusual work schedules. The most typical Working Time Allowances are Overtime Pay, Saturday and Sunday Work Allowances, as well as Evening and Night Work Allowances.

4.3.5.5 One-time bonus payments

One-time bonus payments are paid to military personnel who serve in a non-permanent post in the FDF. This scheme is called Service Time Compensation. In the end of their service, if meeting certain criteria, they receive a one-time-compensation.

The bonus is intended to support their adaptation and education to new civil profession. The magnitude of the bonus is determined on the basis of the duration of the fixed-term employment and income level during employment. The amounts of service time compensation paid have varied between 45,000 and 78,000 euro per person.

4.3.5.6 Deployment-related payments

Deployment-related payments make up 6.5 percent of Finnish personnel expenditures. This number stems from an overview of Finnish defense expenditure stating that 53.1 million euro are paid for personnel costs for military crisis establishment by the Finnish Ministry of Foreign Affairs. The FMOD has not provided numbers for what the FDF spends on this compensation category. We do not know neither how many schemes that the FDF have in place for the monetary incentive system of deployment-related payments nor the FMOD's assessment of the complexity of this compensation category.

The FMOD states that it is hard to single out the top three incentives for this compensation category. The reason is that military personnel deployed abroad serve with (at least) three different sets of rules. In addition, there are separate rules for personnel serving in crisis establishment abroad. Generally, the top payments that appear in some form are: 1) Daily Compensation, 2) Living Costs, and 3) Targeted Compensation.

Daily Compensation is supposed to cover the added costs caused by the deployment on daily basis. The sum is the same for everyone regardless of rank. It varies from 31 to 86 euro per day based on the country in which the deployment takes place. For example, in Germany, the daily compensation is 62 euro per day, while, in Kosovo, it is 48 euro per day. This type of deployment-related payment appears in some form in every set of compensations systems in the FDF.

Living Costs are a compensation for the added living costs of deployment abroad, for instance for the rental of an apartment abroad.

Targeted Compensation are compensation schemes that are in place to offset added costs related to deployment to cover services that the personnel would receive in Finland for free, such as education for children. The schemes are also targeting offsetting expenses like housing.

4.3.5.7 Pension earnings

In Finland, the retirement ages of the military personnel are set out in the "Law on the defence forces". The retirement age of the military personnel is significantly lower than in the general retirement system and contains different retirement ages for different tasks. For example, pilots can retire as early as in the age of 48 years, while the highest retirement age for officers is 65

years. This retirement age is for the Commander of the FDF only. The general retirement age for military personnel is 55–57 years, and it increases when the officers attain higher ranks.

The latest change to the military pension system took effect on January 1, 2018. In the FDF, there are still soldiers under the so-called old pension rules, in which case the soldiers have the opportunity to retire at the age of about 53. The holder of such a pension right may himself consider the date of retirement until the statutory retirement age is reached. A soldier's employment is terminated from the beginning of the month following reaching the retirement age, even if the person has not retired.

The FMOD has not reported any information about the monetary compensation involved in the pension system in the FDF. With a lower retirement age than the rest of the population, there is probably a financial system in place to secure the relatively early retirees from the FDF a reasonable pension. We do not possess information about the value of this system.

4.3.5.8 Tax exemptions

Special tax exemptions are not used in the FDF.

4.3.5.9 Welfare services and payments

Special welfare services and payments are not used in the FDF.

4.3.5.10 Coverage of commuting and housing expenditures

The coverage of commuting and housing expenditures make up 0.2 percent of the Finnish personnel expenditures. In the FDF, due to the nature of the work, military personnel are obligated by the law to relocate in case they are ordered to. To encourage and compensate for frequent change of workplace and the toll of being separated from family and community, several compensation and payment schemes are in place. The FDF has a collective agreement of reimbursing relocation and transfer costs. Certain compensations of this collective agreement are better for the individual than they are in the general state collective agreement.

The three schemes with the highest expenditures are: 1) Housing Rental Cost Compensation Supplement for Commuters, 2) Relocation Compensation, and 3) Compensation for Trips between the Place of Origin and the Place of Relocation.

Housing Rental Cost Compensation Supplement for Commuters is a compensation for the military personnel that have to rent a place close to the workplace. The FDF have apartments to rent for the personnel. The rent is lower than it would be on the open market. The rent is set according to the tax officials limits so that the subsidized rent does not create taxable income. The commuters are first in line for these apartments. Rent subsidies for housing in the FDF are granted within the limit of a maximum amount. The maximum amount is set annually in the National Budget. Rental payments shall be the same or similar to the commuting area of the apartment at a time for up to four years. The rent subsidy is paid per apartment up to a maximum of 7.0 euro per m² and month. The maximum subsidy cannot exceed 35 percent of the first rent. The rent paid

by the resident must be at least in accordance with the decision of the tax administration issued annually on benefits in kind. No taxable benefit in kind may arise on the basis of service lease agreements. In 2019, the FDF spent 1.5 million euro on rent support.

Relocation Compensation is a payment for relocation. Employees who relocate due to work transfer receive a one-time compensation that increases by the number of family members moving. Typically, the family of the military personnel does not relocate to the new place of service. In such cases, the military personnel can receive Compensation for Trips.

Compensation for Trips is a scheme, in which the employer pays a certain amount of trips between the place of commuting and the place where the family stays settled (52 trips within 36 months of the relocation). The FDF reimburses personnel only for travel expenses related to the performance of their duties. The military personnel may declare expenses related to travel between home and work in their tax return, and the taxpayer will take these travel expenses into account in the person's taxation. This same procedure applies to all employees in Finland.

4.3.5.11 Provision of civilian education

The FDF does not provide a standard civilian education scheme. The FDF may support certain studies by paying military employees' salary during education. The education supported must be necessary from the FDF's point of view and essential to the tasks the military employee is responsible for. In return for the paid leave, the employee must sign an agreement to serve in the FDF for a certain amount of time, up to two years. The length of the service required is based on the length of the supported studies.

4.4 Germany

4.4.1 Executive summary

German defense expenditures were 51.3 billion euro in 2020, representing 1.53 percent of GDP. This makes Germany seventh of the twelve countries studied in this report in terms of defense expenditures as a share of GDP. Personnel expenditures accounted for 42.2 percent of total expenditures, which is close to the median, at sixth. The military workforce is 183,000 personnel. Around 60 percent of the military workforce works in the Army. Officers account for 20 percent of the military workforce, and other ranks account for 80 percent. The demographics of the military workforce are the second most young among the selected countries – 65 percent of service members are less than 35 years old. Germany has a monetary incentive system in which base salary plays an important role. In addition, pension earnings and the provision of civilian education have medium to weak role in the German monetary incentive system. Germany has a medium amount of fixed supplements, irregular supplements, and one-time bonus schemes, as well as many deployment-related payments and welfare services. The overall impression is that Germany finds the monetary incentive system to be complex. Still, Germany is satisfied or highly satisfied with how the incentives operate in the Bundeswehr.

4.4.2 Introduction

Germany is located in central Europe. Germany shares borders with nine countries: Denmark, Poland, Switzerland, the Czech Republic, Austria, France, the Netherlands, Belgium and Luxembourg. Germany covers 357,590 km² and is the seventh largest country in Europe. Globally, Germany ranks 64th by area. With its population of 83.16 million, Germany is the continent's second most populous country, after Russia, and 19th globally. The population density is 238 per km². In Germany, 21.7 percent of the population is 65 years and older. This is the sixth highest share in the world.

Germany has the largest economy in Europe and the world's fourth largest economy, with a nominal GDP of 3,367 billion euro in 2020. The GDP per capita was 40,495 euro, ranking 20th in the world. Germany is ranked as the third most complex economy in the world by Atlas of Economic complexity. The country is slightly more complex than expected for its income level.²⁴ The main industries in Germany are the manufacturing industries, chemical industries, consumer and service industries, energy and environmental technology industries, and electrical and electronics industries.²⁵ The employment rate is 76.2 percent, 10.2 percentage points higher than the OECD average.

West Germany joined NATO in 1955, shortly after the Alliance was established, and contributed substantially to the Alliance's military strength in Europe. For the next 40 years, West Germany was the front line of the Cold War in Europe, hosting a large number of NATO troops to deter aggression from the East. West Germany reunified with East Germany in 1990. Germany

²⁴ <https://atlas.cid.harvard.edu/countries/61>

²⁵ <https://www.worldatlas.com/articles/what-are-the-biggest-industries-in-germany.html>

contributes to the NATO alliance with a large military force and high military expenditures within a global perspective. As a share of GDP, expenditures have been around 1.3 percent. Germany has increased its defense spending in recent years, both in absolute numbers and as a share of GDP. After the Russian invasion of Ukraine, Germany announced a major shift in policy. They will further prioritize military spending with a special fund of 100 billion euro (Deutsche Welle 2022). The Bundeswehr (The German Armed Forces) deploys military personnel to twelve different operations in three continents as of 2020. Of the total workforce, three percent are deployed abroad, which equates to 7,145 employees.

The security threats Germany faces today and will face in the coming years, according to the Federal Ministry of the Interior and Community, include Islamist terrorism, a potential increase in crime committed by right- and left-wing extremists, cybercrime, and serious and organized crime.²⁶

The Bundeswehr consists of a military component and a civilian component: the armed forces (*Streitkräfte*) and the Federal Defence Administration, respectively. The military component consists of the Army (*Heer*), the Air Force (*Luftwaffe*), and the Navy (*Deutsche Marine*). In addition to the armed services, the armed forces consist of the following major organizational elements: the Joint Medical Service (*Zentraler Sanitätsdienst der Bundeswehr*), the Cyber and Information Domain Service (*Cyber- und Informationsraum*), and the Joint Support and Enabling Service (*Streitkräftebasis*). The civilian part of the Bundeswehr, the Federal Defence Administration, includes the areas of personnel, infrastructure, environmental protection and services.²⁷ The German Federal Coast Guard (*Küstenwache*) is a civilian law enforcement organized as an association of several federal agencies, including the Federal Police (*Bundespolizei*) and the Maritime Customs Service (*Kontrollinheit See*).²⁸ The Coast Guard is thus the responsibility of several ministries (e.g., the Federal Ministry of the Interior and the Ministry of Finance). The German Federal Ministry of Defence (GMOD) is not responsible for the Coast Guard.

4.4.3 Defense expenditures

German defense expenditures amounted to 51.3 billion euro in 2020. This constitutes 1.53 percent of GDP. In absolute numbers, Germany has the seventh highest military spending in the world. Personnel expenses were 19.1 billion euro. Personnel expenses made up 42 percent of defense expenditures in 2020, as shown in Figure 4.36.

²⁶ <https://www.bmi.bund.de/EN/topics/security/security-node.html>

²⁷ <https://www.bundeswehr.de/en/organization>

²⁸ https://www.bundespolizei.de/Web/DE/05Die-Bundespolizei/03Organisation/02Direktionen/BadBramstedt/Kuestenwache/kuestenwache_anmod.html

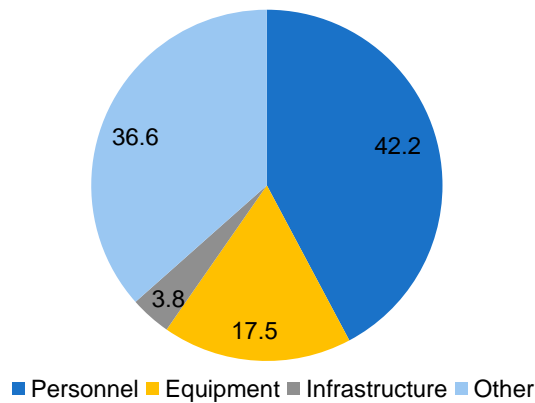


Figure 4.36 Distribution of defense expenditures, in percent. Source: NATO.

The GMOD reports an approximate assessment of the magnitudes of the ten compensation categories. Base salary makes up the greatest portion of personnel expenditures. The GMOD reports that base salary represents 50–70 percent of personnel expenditures. The second largest compensation category is pension earnings, making up between 25 and 50 percent of personnel expenditures. The third largest compensation category is civilian education, making up between 10 and 25 percent of personnel expenditures. Fixed supplements and one-time bonus payments constitute 1–10 percent of personnel expenditures each. The following compensation categories make up less than 1 percent of personnel expenditures each: irregular supplements, tax exemptions, welfare services and payments, and commuting and housing expenses.

4.4.4 The personnel situation

The Bundeswehr employs 265,055 officers, other ranks, and civilians. The Bundeswehr also commands 17,021 reservists. These reservists have a different pay structure than the remainder of employees. Reservists are excluded from the analysis provided in this report. The Bundeswehr is composed of solely voluntary professionals and employs no conscripts.

The Bundeswehr has three branches: the Army (*Heer*), the Navy (*Deutsche Marine*), and the Air Force (*Luftwaffe*). Figure 4.37 shows the distribution of military employees within the branches in total numbers, both for officers and other ranks. The Army has the highest number of personnel, at 113,276 military employees, which represents more than 60 percent of the total number of officers and other ranks in the Bundeswehr. The Air Force has 46,136 military employees— 25 percent of all officers and other ranks in the Bundeswehr. The Navy employs 24,365 military employees.

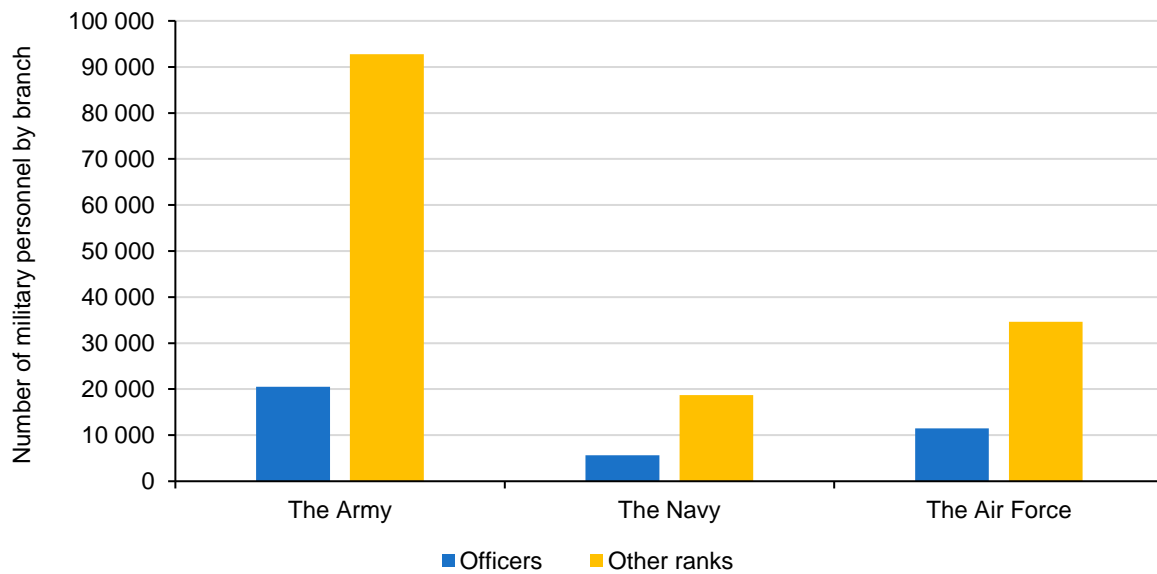


Figure 4.37 Number of military personnel, by branch, officers and other ranks. Source: The GMOD.

Figure 4.38 shows the distribution of officers by branch. Most officers work in the Army— 54.5 percent. The Navy and the Air Force have 15.0 and 30.6 percent of the officers, respectively.

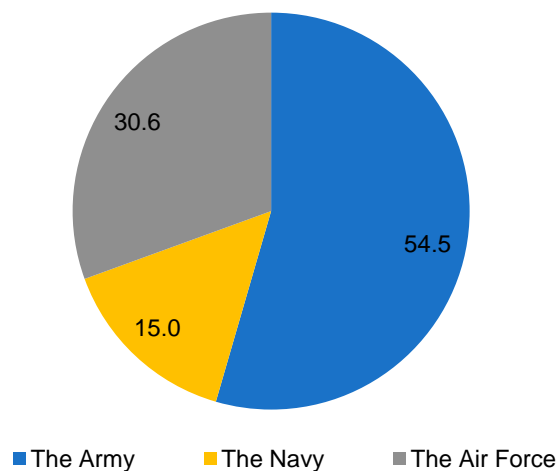


Figure 4.38 Share of officers by branch, in percent. Source: The GMOD.

Figure 4.39 shows the distribution of other ranks by branch. A large majority of the other ranks work in the Army— 63.5 percent. The Navy and the Air Force have 12.8 and 23.7 percent of the other ranks, respectively.

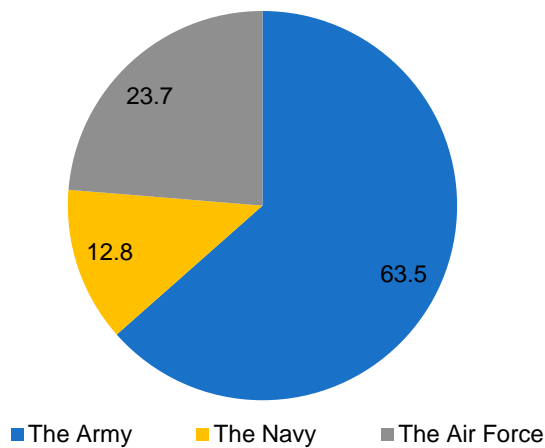


Figure 4.39 Share of other ranks by branch, in percent. Source: The GMOD.

Figure 4.40 shows the age distribution of the employees. Note that young age groups have fewer cohorts as compared to the older age groups. There is a relatively even age distribution among the officers. If we sum up the officers from 26 to 34 years old, these represent 30 percent of officers overall. More officers are in this age group as compared to the 35–44 age group (27 percent), and the 45–54 age group (23 percent). Other ranks have a relatively young composition. The 15–25 group makes up 29 percent of the other ranks, and the 26–34 group makes up 43 percent of the other ranks. Civilians in the Bundeswehr are significantly older than military employees. Only 22 percent of the civilians are under 35 years old, and 61 percent are older than 44 years old.

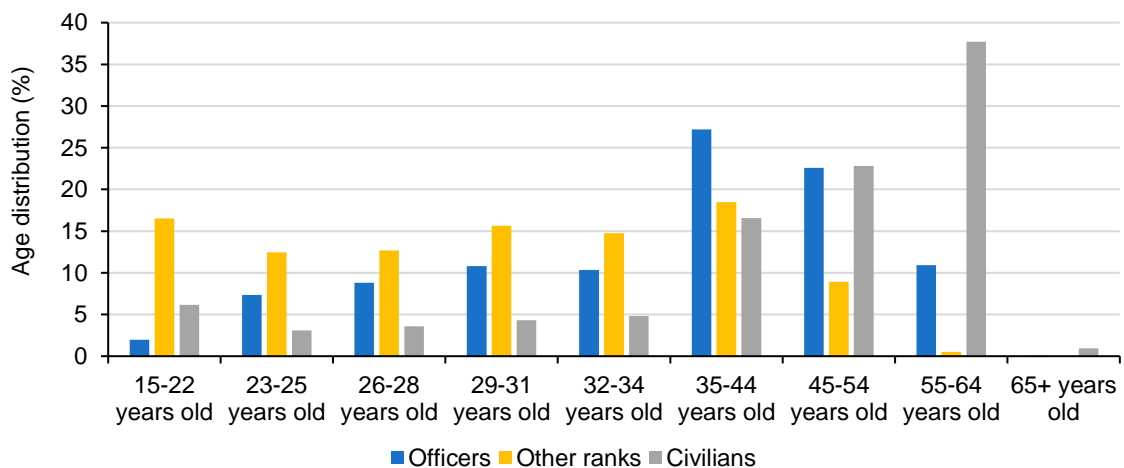


Figure 4.40 The age distribution among the officers, other ranks, and civilians, in percent (each employee group sums up to 100 percent). Source: The GMOD.

The Bundeswehr deploys 7,145 personnel abroad. This is 3 percent of the total workforce. Of these, 55 percent are deployed in peacetime establishments, and 45 percent in crisis establishment

as of 31.12.2020. Military personnel are deployed in twelve operations in three continents. These operations include Lebanon, Sudan, South Sudan, Western Sahara, and Yemen.²⁹

4.4.5 Compensation categories

4.4.5.1 Data description

Germany provides a comprehensive description of their monetary incentive system. However, the GMOD did not provide quantitative data in the standard format in the RFI, so the descriptions of the GMODs compensation categories differ in this sense as compared to some of the other countries studied. Germany reports the number of schemes and complexity of all compensation categories, except the complexity of the compensation category coverage of commuting and housing expenditures. Additionally, they provide top three incentives for fixed supplement, one-time bonus, tax allowances, welfare services and payments, deployment related payments, provision of civilian education, and top two incentives for coverage of commuting and housing expenditures.

4.4.5.2 Base salary

The GMOD reports that base salary represents a large part of their personnel expenses, between 50-75 percent, in their qualitative assessment of the personnel expenses. The Bundeswehr has two pay systems: one for volunteers for military service and one for professional and temporary soldiers.

Voluntary military service is a special civic commitment that men and women who are at least 17 years old, have completed compulsory full-time education, and have German citizenship can make (Bundeswehr 2022). Service consists of a six-month probationary period and up to 17 months of subsequent military service. Those who perform in the voluntary military service receive payment according to the Military Service Salary Act. The rank of a volunteer determines their base salary, as shown in Table 4.6.

Table 4.6 Overview of military pay groups and base salary per month.

Military pay group	Rank	Basic military pay (§ 4, paragraph 1) Euro/month
1	Fighter, tank gunner, armored infantryman, gunner, combat engineer, tank engineer, radio operator, airman, medical orderly, sailor	1,518
2	Private	1,569
3	Lance Corporal (obergefreiter)	1,670
4	Lance Corporal (hauptgefreiter)	1,923

Source: The GMOD.

²⁹ [The Bundeswehr on Operations.](#)

The Federal Salary Act determines payment for professional and temporary soldiers. The Federal Salary Act contains four salary scales (A, B, R, and W), where A and B are relevant to the Bundeswehr.

A soldiers' respective rank determines their base salary. Their rank is assigned to a grade in Salary Scale A. Salary Scale A contains 14 salary grades, and a grade consists of eight steps. The prerequisite for regular step advancement is performance in line with requirements. In cases of outstanding performance, a higher step can be awarded earlier. Below-average performance can, on the other hand, delay the steps for a limited period.

Salary Scale B covers the fixed base salaries for officers from colonel to general in 11 grades. For these, no additional step advancement within a grade is determined. Figure 4.41 shows the monthly fixed salaries for various ranks in the Bundeswehr based on Salary Scale B.

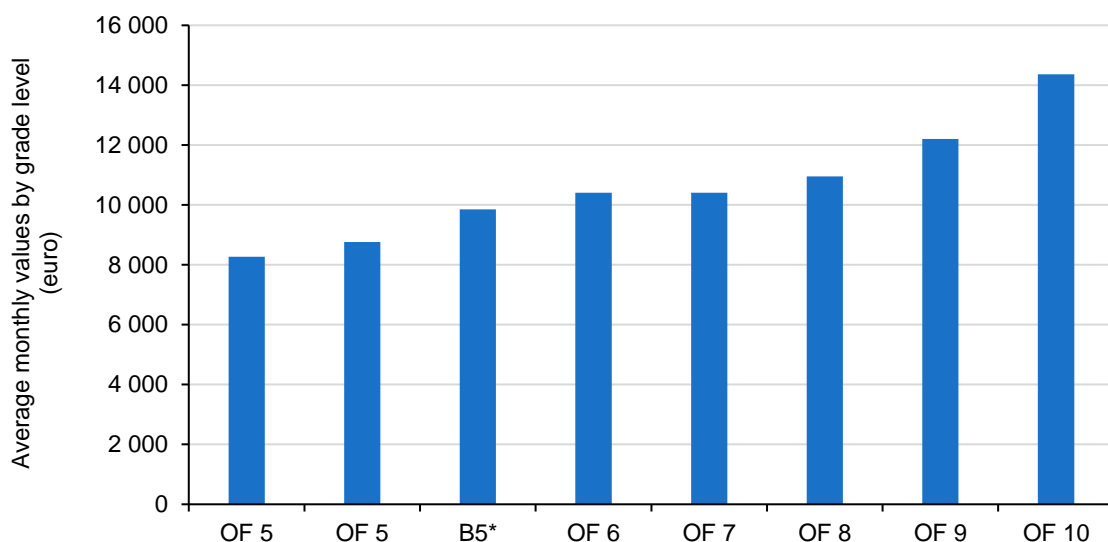


Figure 4.41 Base salary among officers, in euro. Source: The GMOD. Note: B5 is a grade in the federal salary scale B in Germany. *No fitting NATO-code.

4.4.5.3 Fixed supplements

The GMOD reports that fixed supplements represent a small part of their personnel expenses, between 1-10 percent, in their qualitative assessment of the personnel expenses. The Bundeswehr has 13 payment schemes characterized as fixed supplements. The GMOD reports the top three schemes to be 1) the Family Allowance, 2) Allowances, and 3) Non-monetary Compensation. Scheme 1 and 2 are intended to improve recruitment and increase retention rates. Additionally, scheme 2 is intended to incentivize deployment abroad. The GMOD assesses scheme 2 as satisfactory and has no answer regarding satisfaction with the other two schemes.

Scheme 1, the Family Allowance, consists of a child supplement and a marriage supplement. A soldier's family situation influences their pay.

Scheme 2, Allowances, includes the following: allowances for the performance of special functions and posts, allowances to compensate for special hardships, and allowances for the special time-related burdens placed on soldiers when they cannot enjoy leisure time. These allowances are linked to rank and shown in Table 4.7. The Bundeswehr currently pays 18 function-related post allowances.

Scheme 3, Non-monetary Compensation, includes compensation for uniforms and equipment, free medical care provided by the medical staff in the Bundeswehr, and communal accommodation because of official duties.

Table 4.7 Fixed supplements, by grade and title, monthly amounts in euro.

Rank (Title)	Official Allowances (monthly amounts)
Private (Grade A 3)	40.8
Lance Corporal (Grade A 4)	8.8
Corporal (Grade A 5)	43.9
Staff Corporal (Grade A 6)	43.9
First sergeant, Chief Petty Officer (Grade A 7)	54.5
Master sergeant, Master Petty Officer, Midshipman, Midshipman at sea (Grade A 8)	70.2
Sergeant Major, Chief Petty Officer (Grade A 9)	326.8
Staff Captain, Staff Captain`s Lieutenant (Grade A 13)	332.1
Inspector General (Grade B 10)	526.1

Source: The GMOD.

4.4.5.4 Irregular supplements

The GMOD reports that irregular supplements are negligible, representing less than 1 percent of personnel expenses, in its qualitative assessment of the personnel expenses. The Bundeswehr has 13 schemes for irregular supplements, which the GMOD characterizes as complex.

The GMOD does not report the top three irregular supplements. Instead, they provide an overview of the hardship allowances granted in the Bundeswehr. The Bundeswehr currently pays 25 hardship allowances. Some are paid per hour, while others are paid per day, per use, or per month. The allowance with the highest possible amount per hour is for divers, and it varies between 3.88 and 125.8 euro per hour. The type of equipment, diving depth, and operating conditions, such as inland waters, open sea, flow, and temperature, determines the size of the supplement. The highest irregular supplement paid per day is for antenna work, and it varies between 2.14 and 19.69 euro. This supplement varies based on the amount of work, the type of activity performed, and the time of year. Explosives Disarmers are paid per use, and the allowance is 35.78 euro per use. The highest irregular supplement paid per month is for commandos/combat swimmers in active service and training in the special forces. It is set at 1,125 euro per month.

4.4.5.5 One-time bonus payments

One-time bonuses make up a small part—about 1 percent—of total personnel expenditures. The German monetary incentive system has eleven schemes of one-time bonuses. The top three one-time bonuses are 1) the Performance Bonus, 2) Bonuses, and 3) Redundancy Pay.

The Performance Bonus is intended to induce more effort by rewarding outstanding performance. Up to 15 percent of soldiers in grade A3 to A16 may be granted a Performance Bonus instead of a performance step. The Performance Bonus is limited to the monthly amount of the initial base salary of the respective grade and may not exceed seven percent of the initial base salary per month. The scheme has not been reformed in the past five years. The GMOD has no answer regarding whether the scheme is meeting its purposes in a satisfactory manner.

Scheme 2, Bonuses, is intended to improve recruitment, increase retention rates, and incentivize deployment abroad. The GMOD characterizes the system as complex and very satisfactory. It includes the recruitment bonus, retention bonus, and commitment bonus. To recruit qualified applicants to serve as professional soldiers a recruitment bonus of up to 30 percent of a professional soldier's initial base salary may be granted for up to 12 years. In addition, a retention bonus of up to 30 percent of the soldier's initial base salary may be granted for the retention of particularly qualified professional soldiers and specialists. The purposes of the commitment bonus are to recruit and retain soldiers in areas for which there are personnel shortages. For each year of commitment, a bonus of up to twice the initial salary of the soldier may be granted. For key personnel, a commitment bonus of up to 3.5 times the initial base salary may be granted for each year of commitment. The GMOD is highly satisfied with how scheme 2, Bonuses, is meeting its purposes. The scheme has been reformed in the past five years.

Scheme 3, Redundancy Pay, is for voluntary military service members who perform more than six months of military service. These personnel receive a dismissal allowance of 100 euro for each month of voluntary military service performed upon dismissal. The purposes of Redundancy Pay are to improve recruitment and increase retention rates. The GMOD assesses the incentive scheme as achieving its goals in a satisfactory manner. The scheme has been reformed in the past five years.

4.4.5.6 Deployment-related payments

The Bundeswehr has 38 schemes characterized as deployment-related payments. The GMOD assesses the incentive system for this compensation category as complex. The top three deployment-related payments are 1) the Foreign Assignment Supplement (AVZ), 2) General Foreign Pay, and 3) Foreign Pay for Voluntary Military Service Members.

The AVZ is given for participation in a special foreign assignment. It covers all additional material expenses and immaterial burdens. This includes, for instance, burdens due to temporary accommodation, as well as burdens due to threats. The AVZ is paid tax-free for each day of the special foreign assignment, and the amount is solely based on the degree of stress and is the same for all ranks. The scheme has been reformed in the past five years.

General Foreign Pay is for professional and temporary soldiers permanently assigned abroad. Personnel deployed abroad on permanent duty (e.g., with NATO, the EU, or attaché duty) receive the following tax-free payments in addition to their military pay at home: foreign compensation, rent subsidy, and purchasing power compensation. For professional and temporary soldiers, foreign compensation takes the circumstances in a given location into account, as well as the number of family members moving abroad with them. The GMOD does not report the purpose of this incentive or whether it has been reformed the past five years.

Foreign Pay for Voluntary Military Service Members is foreign pay for voluntary military service personnel permanently assigned abroad. Soldiers deployed abroad on permanent duty (e.g., with NATO, the EU, or attaché duty) receive the following tax-free payments in addition to their military pay at home: foreign compensation, a rent subsidy, and purchasing power compensation. The purposes of this incentive are to improve recruitment and incentivize deployment abroad. The GMOD does not report whether the incentive is achieving its purposes. The scheme has been reformed in the past five years.

4.4.5.7 Pension earnings

Pension expenditures is a medium-sized component of total personnel expenditures. The Bundeswehr operates using three pension schemes. The GMOD characterizes the pension compensation category as complex. There is a distinction between three groups of soldiers: those engaged in voluntary military service, soldiers on temporary duty, and professional soldiers.

Personnel doing voluntary military service and soldiers on temporary duty quit the Bundeswehr after an individually agreed-upon period of service. In these cases, there is no mention of retirement, because military service is followed by a civilian working life, unlike for professional soldiers. Professional soldiers retire by law after reaching the general retirement age of 62. The retirement age will, however, gradually be increased to 65 by 2024 for generals/admirals and many professional soldiers. The special age limits will also be raised gradually by 2024, depending on rank, from the former age of 53–61 to an age of between 55 (career non-commissioned officers) and 62 (colonel/captain at sea). A special regulation applies to officers who are aircraft pilots or weapons systems officers in jet-powered combat aircraft. For them, the special age limit remains 41 years (or 40 years in the case of incapacity for military service).

Personnel doing voluntary military service receive no pension benefits from the Bundeswehr after leaving. Professional soldiers have their own pension scheme, which is aligned with the pension scheme applicable to federal civil servants. Upon retirement, they receive a pension for life. Soldiers on temporary duty receive temporary benefits intended to support and promote reintegration into civilian professional and working life. They also receive a payment into the statutory pension insurance scheme to account for the period of service in their pension.

Pension entitlements earned during service can be carried over in the event of premature dismissal from the lifetime employment relationship. This has removed an obstacle to career mobility when switching between federal civil service and the private sector.

Retired professional soldiers receive a taxable monthly pension for the rest of their lives. The following three factors determines the amount: the pensionable service period, the pensionable remuneration, and the pension rate.

4.4.5.8 Tax exemptions

The GMOD reports that tax exemptions are negligible, representing less than 1 percent of personnel expenses, in its qualitative assessment of personnel expenses. The GMOD reports that one tax exemption scheme is in operation for military personnel. However, the GMOD lists top three incentives for this compensation category. The GMOD characterizes the tax exemption system as complex. The top three incentives are 1) a flat-rate tax on rail travel, 2) zero tax on the foreign assignment supplement (AVZ), and 3) no tax on general foreign pay.

Personnel in uniform may travel privately by train free of charge within Germany. The costs incurred for the tickets are borne by the employer. In addition, the employer also pays tax on the associated non-cash benefits by means of lump-sum taxation. This means that the soldiers do not have to pay the corresponding costs. At the same time, the soldiers can claim the flat-rate commuting allowance as part of their annual income tax equalization. In this way, they save on their taxes even though they have not incurred any costs. Additionally, foreign pay, including the rent allowance and purchasing power compensation is tax free. The purposes of this tax exemption are to improve recruitment, increase retention rates, and induce effort. The GMOD is satisfied with how well the incentive is achieving its purposes. The incentive has been reformed in the past five years.

The next two tax exemptions relate to deployment-related payments. Military employees in the Bundeswehr pay no taxes on the AVZ and general foreign pay. The purpose of the tax exemption for the AVZ is to incentivize deployment abroad, while the purposes of the tax exemption on general foreign pay are to improve recruitment and incentivize deployment abroad. The GMOD provides no answer regarding satisfaction with these tax exemptions in terms of achieving their purposes. The tax exemption for the AVZ has been reformed the past five years, while the tax exemption on general foreign pay has not.

German tax law does not provide for any other tax benefits that apply specifically to military personnel.

4.4.5.9 Welfare services and payments

The GMOD reports that welfare services and payments are negligible, representing less than 1 percent of personnel expenses, in its qualitative assessment of personnel expenses. The GMOD reports that there are 23 schemes for welfare and service payments for military personnel in the Bundeswehr. The GMOD characterizes the monetary incentive system for this compensation category as complex.

The top three allowances are as follows: the 1) Foreign school allowance, 2) Child travel allowance and 3) Soldiers' Household Assistance Ordinance (SHV). The purpose of the

mentioned welfare services and payments is to incentivize deployment abroad. The GMOD is very satisfied with these allowances. In the past five years, (1) and (2) have undergone reforms, while (3) has not.

The Foreign school allowance is a reimbursement provided to professional soldiers and temporary soldiers on duty abroad. Under certain conditions, these personnel groups are reimbursed for the costs of childcare or school attendance. The costs must be higher than the costs in Germany. In addition, expenses in the form of necessary travel costs for children and accompanying persons to reach a school or daycare center are eligible for reimbursement.

The child travel allowance is paid for trips that mainly serve to maintain contact between the child and their parents, as well as to exercise the right of access (§ 1684 of the German Civil Code - BGB). The child travel allowance is an allowance paid by the employer to cover a child's travel costs from the child's place of residence in Germany to the federal employee's place of employment abroad.

The SHV is a reimbursement of the costs related to the absence of a parent due to deployment abroad. The reason for the creation of SHV was the personal stress the absence of a parent can cause. According to the legal justification, the reimbursement of costs is aimed at coping with exceptional circumstances. The regulation only provides benefits for the care of children (up to the age of 12) or the care of relatives. This means that household cleaning and shopping activities, for example, are not eligible for reimbursement. In addition, reimbursement is limited to caregivers who are not close relatives (e.g., parents or grandparents) of the soldier.

4.4.5.10 Coverage of commuting and housing expenditures

The GMOD reports that the coverage of commuting and housing expenditures are negligible, representing less than 1 percent of personnel expenses, in its qualitative assessment of personnel expenses. The Bundeswehr has two schemes for the coverage of commuting and housing expenses: 1) the Separation Allowance and 2) the Relocation Allowance. The purposes of these two incentives are to improve recruitment, increase retention rates, provide for the satisfying separation of personnel, and incentivize deployment abroad. The GMOD assesses the separation allowance as highly satisfactory in terms of achieving its purposes, while the relocation allowance performs at an average level concerning purpose achievement. Both schemes have been reformed the past five years.

In addition, personnel receive compensation for additional meal expenses, travel costs, and commuter rent. The necessary costs for service-related mobility are borne by the employer within the framework of the Federal Relocation Costs Act, the Federal Travel Costs Act, and the Separation Allowance Ordinance. To ensure the operational capability of a commuter army, the travel expenses/moving expenses/separation allowance law is constantly reassessed and adapted.

In the defense sector, transfers are particularly frequent, including those due to plans for military deployment. The associated increase in relocations interferes with the life plans of the employees concerned and their families, some of whom do not wish to move to the new duty station for

various reasons. This creates an alternative to moving to the new place of employment, one that compensates for the hardships of job-related mobility and is in line with the reality of life in today's society. However, single persons without their own homes must relocate.

If the decision is made not to move and this results in a separate household, the additional costs are covered via the granting of a separation allowance. If the decision made is to move to the new place of employment, the necessary costs incurred during the move are reimbursed. The basis for this is the Federal Relocation Costs Act. The GMOD is highly satisfied with the separation allowance, and satisfied with the relocation allowance in achieving their purposes.

4.4.5.11 Provision of civilian education

The GMOD reports that the provision of civilian education is moderate-sized, representing 10-25 percent of personnel expenses, in its qualitative assessment of personnel expenses. The GMOD reports that the Bundeswehr has two schemes for the provision of civilian education, which the GMOD characterizes as complex. The GMOD reports the following top three incentives for this compensation category: 1) Social Security (welfare), 2) Personnel Retention, and 3) Personnel Recruitment. The GMOD reports that the purposes of these three incentives are to improve recruitment, increase retention, and induce effort. The GMOD is highly satisfied with incentive (1) and satisfied with incentive (2) and (3) in achieving their purposes. All three incentives have been reformed in the past five years.

The GMOD does not provide further information about the incentives. They do, however, provide information about the system for the provision of civilian education.

The Bundeswehr has a vocational support system (BFD) that provides temporary soldiers leaving military service with educational and vocational qualifications for the transition to civilian working life, as well as support in obtaining an adequate job. The BFD includes in particular counseling, training, education, and vocational schemes. The personnel can engage with the schemes during, at the end of, and after military service. Additionally, military service personnel receive support in their search for civilian training and jobs, and the BFD cooperates closely with a wide range of commercial enterprises in Germany.

The support the personnel receive in civilian training, which includes education and vocational training, is based on the time period of military service completed. Each year served leads to an increase in the support, to a maximum after 12 years of service.

In addition, even during the period of military service, the BFD offers initial civilian training measures in service-accompanying form (e.g., at weekends or after daily duty). This is accomplished through the civilian education market in Germany; helps in acquiring basic, simple skills (e.g., language and IT skills); and is intended to maintain the link to lifelong learning and civilian working life during military service. Participation is dependent solely on usability for later career goals after leaving military service, as well as the previous qualifications that the individual soldier possesses. The Bundeswehr spent 8.6 million euro on this in 2019.

To provide financial security during this educational phase after leaving active service, the soldiers on temporary duty also receive benefits. These include transitional allowances, which are a monthly grant at 75 percent of the former service pay. The period of entitlement depends on the length of service and is 60 months for service of 12 years or more. If the military personnel have acquired qualifications that they can use in a civilian occupation during military training, this generally leads to a reduction in the duration of the entitlement.

In addition, military service personnel who have served in the Bundeswehr for at least 12 years can apply for so-called reserved positions in the civil service. These are a certain contingent of open training positions that are generally intended to be filled by former soldiers on temporary duty. However, soldiers on temporary duty must also fulfill the typical recruitment requirements, with the exception of any existing age limits for recruitment. For many years, this interlocking system of reintegration has successfully integrated more than 94 percent of former soldiers on temporary duty into the civilian labor market in the long term.

4.5 Italy

4.5.1 Executive summary

Italian defense expenditures were 26.4 billion euro in 2020, representing 1.59 percent of GDP. This is close to the median – fifth among the twelve countries studied in this report. The personnel expenditures accounted for 67.4 percent of total expenditures, which is the highest share in this regard among the selected countries. The military workforce is close to 290,000 personnel. Thirty-four percent of the military workforce works in the Army, while 38 percent works in the Home Guard. Officers account for 10 percent and other ranks account for 90 percent of the military workforce. The demographics of the military workforce skew old compared to the other countries in this study – only 27 percent are less than 35 years old. Italy has a monetary incentive system in which base salary constitutes 59 percent of the total personnel expenditures. In terms of the share of base salary, Italy has the lowest among the selection of countries. Fixed supplements and irregular supplements make up most of the remaining personnel expenditures. Italy has by far the largest emphasis on fixed supplements and the second largest emphasis on irregular supplements, among the countries studied in this report. Italy has relatively few schemes per compensation category. The overall impression is that the Italian incentive system is a mix of complex (fixed and irregular supplements) and simple (one-time bonus, deployment-related payments, welfare services, coverage of commuting and housing expenses, and provision of civilian education) compensation categories. Italy is satisfied or highly satisfied with how the incentives work in its armed forces.

4.5.2 Introduction

Italy is a unitary parliamentary republic in South Central Europe. It borders to France, Switzerland, Austria, Slovenia, the Vatican City, and San Marino. Italy covers 301 336 km², and is ranked 73rd globally by area. It is the third most populous country in the EU, with a population of nearly 60 million. Globally, Italy ranks as 24th by population in 2020. The population density

is 201 per km². In Italy, 23.3 percent of the population is aged 65 and above. This is the second highest share in the world.

Italy's GDP was 1,657 billion euro in 2020, ranking eighth in the world. The GDP per capita was 27,872 euro, ranking 36th in the world. Italy ranks as the 16th most complex economy in the world by Atlas of Economic Complexity. The country is slightly more complex than expected for its income level.³⁰ The main industries in Italy are the service sector, agriculture, tourism and manufacturing.³¹ The employment rate in 2020 was 57.5. This is the lowest rate among the countries we study in this report, and 8.5 percentage points lower than the OECD average.

Italy is a founding member of NATO and the EU. These institutions play a primary role in the national security and defense policies in Italy. Italy strives to create a more secure Euro-Atlantic region, a more secure Euro-Mediterranean region, and a more secure and stable global system. The missions of the Italian Armed Forces (IAF) is to defend the state, defend the Euro-Atlantic and Euro-Mediterranean regions, contribute to the development of peace and international security, execute specific tasks, and join operations.³²

Italy deploys military personnel to peacekeeping operations abroad. Major deployments are and have been in Lebanon, Iraq, Afghanistan, Kosovo, Libya, Niger, and Somalia.³³ The IAF has increased the number of missions it participates in over the decades and in particular in the post-Cold War period.³⁴ The IMOD reports that 3.4 percent of the IAF's military personnel are deployed abroad in 2020.

The External Intelligence and Security Agency mentions geopolitical scenarios, international terrorism, irregular immigration, extremism, climate change, and cyber threats as the most pressing security threats.³⁵

The IAF consists of the following four branches: the Army (*Esercito Italiano*), the Navy (*Marina Militare*), the Air Force (*Aeronautica Militare*), and the Carabinieri (*Arma dei Carabinieri*). The Carabinieri operates as the nation's military police and is involved in operations abroad. The Carabinieri is a dual organization of military and civilian police forces. In this report, we locate the Carabinieri in the Home Guard category. The Italian Coast Guard (ITCG) is a body of the Italian Navy whose tasks and functions mainly are connected to civilian use of the sea. It is an administrative, governmental and policing body, with a military status.³⁶ The ITCG mainly depends on the Ministry of Infrastructure and Transport functionally, which ensures the relevant budget. The ITCG carries out tasks and duties on behalf of different ministries and other national authorities. The IMOD states that the Coast Guard has a dual responsibility both for defense and homeland issues.

³⁰ <https://atlas.cid.harvard.edu/countries/61>

³¹ <https://www.worldatlas.com/articles/which-are-the-biggest-industries-in-italy.html>

³² https://www.difesa.it/Primo_Piano/Documents/2015/07_Luglio/White%20book.pdf

³³ <https://www.iai.it/en/pubblicazioni/italian-military-operations-coping-rising-threats-and-declining-us-leadership>

³⁴ <https://www.tandfonline.com/doi/full/10.1080/13533312.2022.2054044>

³⁵ <https://www.sicurezzanazionale.gov.it/sisr.nsf/wp-content/uploads/2022/02/RELAZIONE-ANNUALE-2021.pdf>

³⁶ <https://ecgf.efca.europa.eu/institution/italian-coast-guard>

4.5.3 Defense expenditures

The Italian defense expenditures amounted to 26,360 million euro in 2020. This represents 1.59 percent of the GDP. In absolute numbers, Italy has the 11th highest military spending in the world.

In Figure 4.42, the distribution of defense expenditures is shown. Expenditures on personnel constitute 67.4 percent of total expenses. Expenditures on equipment, infrastructure and other components constitute 18.6, 1.0, and 13.0 percent of total expenditures, respectively. The IAF has a relatively high share of expenditures on personnel.

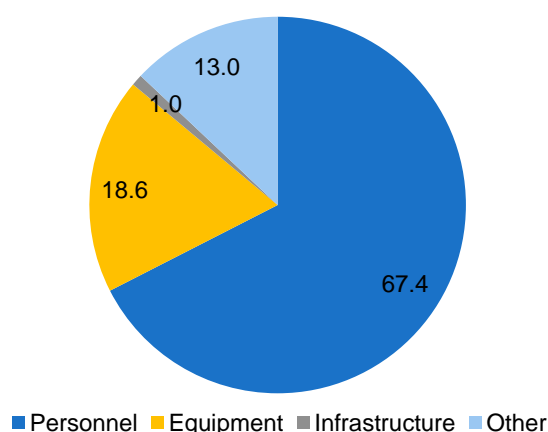


Figure 4.42 Distribution of defense expenditures, in percent. Source: NATO.

Figure 4.43 shows the shares per compensation category of the personnel expenditures. Base salary constitutes almost 60 percent of the personnel expenditures. Fixed supplements make up 25.7 percent of personnel expenditures, and irregular supplements make up 11.2 percent. The other four compensation categories – one-time bonus, welfare services and payments, commuting and housing expenses, and civilian education, account for 1.8, 1.0, 0.9, and 0.1 percent of the personnel expenditures, respectively.

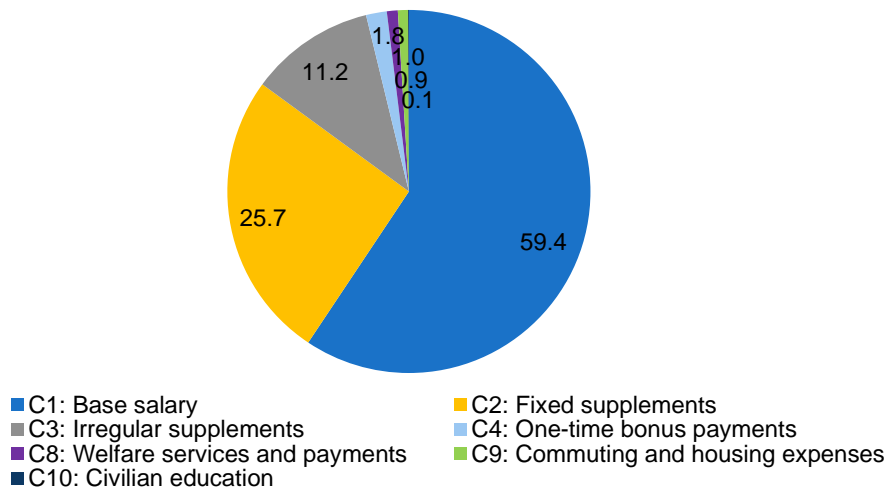


Figure 4.43 Distribution of compensation categories in the Italian expenditures on personnel, in percent. Source: The IMOD.

4.5.4 The personnel situation

There are in total 314,551 personnel in the IAF. Of these are 27,540 officers, 260,742 other ranks, and 26,269 civilians. Reservists are included in the numbers of officers.

In Figure 4.44, the number of officers and other ranks is shown by branch. The Army, the Navy, the Air Force, and other institutions have 98,634, 28,852, 40,340, and 137 military personnel, respectively. There are 10,659 personnel in the ITCG. They have dual military and civilian work tasks. In addition, there are 109,660 personnel in the Home Guard. The Home Guard is a dual-hatted military and civilian police force.

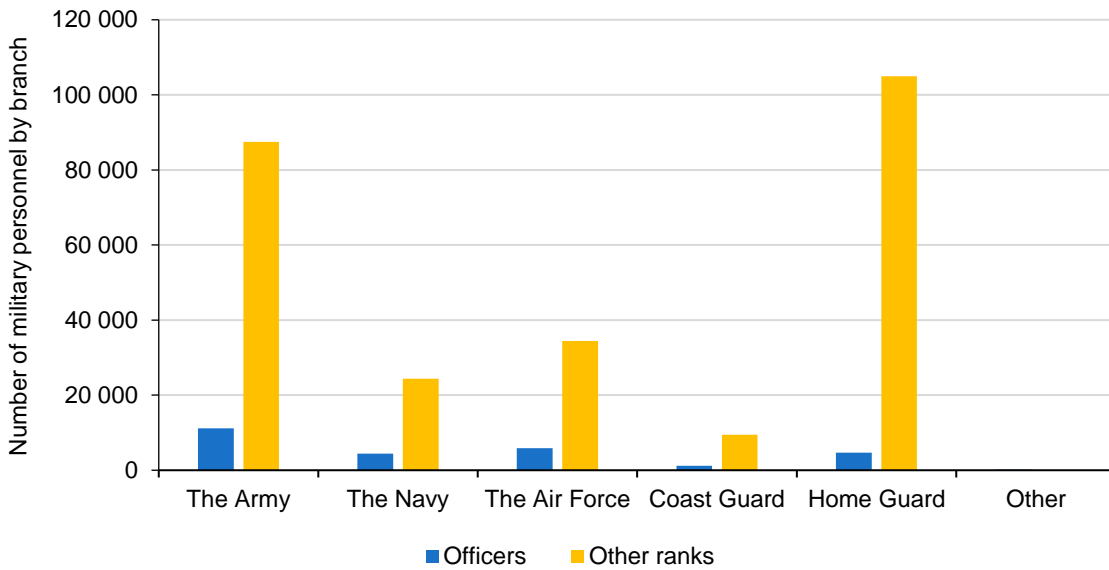


Figure 4.44 Number of military personnel, by branch and defense institutions, officers and other ranks. Source: The IMOD.

Figure 4.45 shows the distribution of officers by branch. Around half of the officers work in the Army. The Navy and the Air Force employ 20.6 and 27.4 percent of the officers, respectively. The shares of military personnel in the ITCG and the Home Guard are not included in these figures.

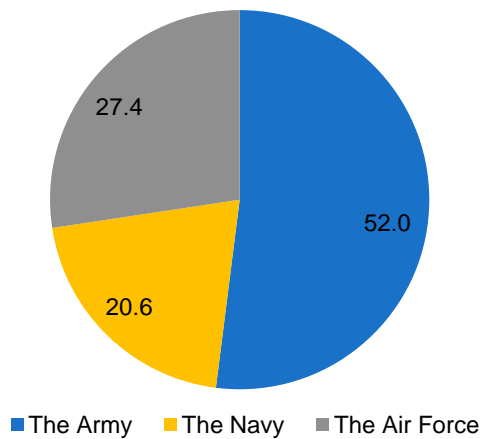


Figure 4.45 Share of officers by branch, in percent. Source: The IMOD.

Figure 4.46 shows the distribution of other ranks by branch. The majority of other ranks, 59.8 percent, work in the Army. The Navy and the Air Force employ 16.7 and 23.5 percent of the other ranks, respectively.

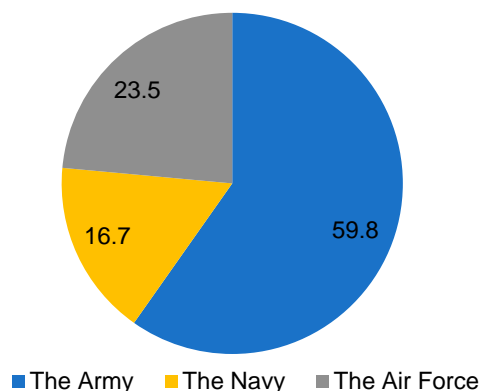


Figure 4.46 Share of other ranks by branch, in percent. Source: The IMOD.

Figure 4.47 shows the overall age distribution of officers, other ranks, and civilians. Reservists are included in the officers group; hence, the profile of the age structure may differ between permanent, full-time working officers and the shares in the figure.

Of the officers (including reservists), 19 percent are under 35 years old and 32 percent are 50 years old and above. Of the other ranks, 28 percent are under 35 years old and 23 percent are 50 years old or above. Of the civilians, less than 2 percent are under 35 years old and over 78 percent are 50 years old and above.

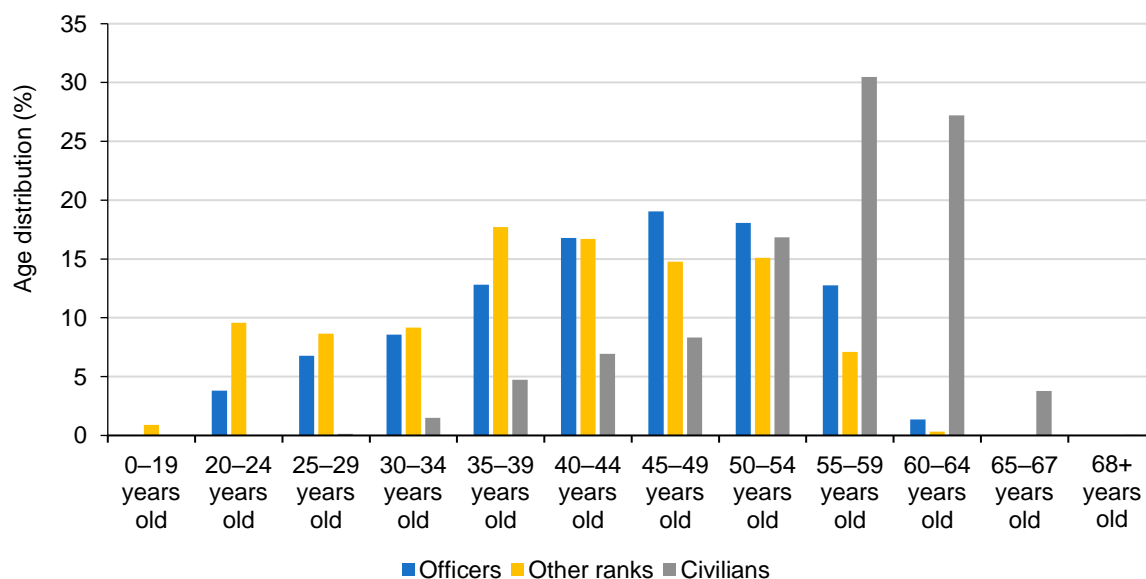


Figure 4.47 The age distribution among the officers, other ranks, and civilians, in percent (each employee group sums up to 100 percent). Source: The IMOD.

The IAF participates in international peacekeeping and military operations abroad. In 2020, 3.4 percent of military personnel were deployed abroad. Of military personnel deployed abroad, 97 percent participated in peacetime establishments, while three percent were deployed in crisis establishments.

4.5.5 Compensation categories

4.5.5.1 Data description

Italy reports the amount spent on each compensation category. For all compensation categories, except base salary, the IMOD takes the average compensation for officers and for other ranks, and multiplies this amount with the number of officers and other ranks to provide data for age categories. Because of this, the distribution of the compensation categories by age group have the same shape. The IMOD uses other age categories than suggested in the RFI. Italy reports the number of schemes and complexity of the schemes for fixed supplements, irregular supplement, one-time bonus, welfare services and payments, coverage of commuting and housing expenditures, provision of civilian education, and the complexity of deployment-related payments. Additionally, they provide the top three incentives of fixed supplement, irregular supplements, and welfare services and payments. For one-time bonus, coverage of commuting and housing expenditures, and provision of civilian education, Italy reports top one incentive.

4.5.5.2 Base salary

The IMOD reports the expenditures on base salary and other compensation categories. Base salary constitutes almost 60 percent of total personnel expenditures. The IMOD also reports the total spending per age group. Figure 4.48 shows the total spending on base salary per age group for officers and other ranks.

We use these amounts to calculate the average annual base salary for types of military personnel. The average annual base salary for officers, including reservists, is 43,748 euro. For other ranks, the average annual base salary is 23,366 euro. Note that all the above are gross figures (before deduction of taxes).

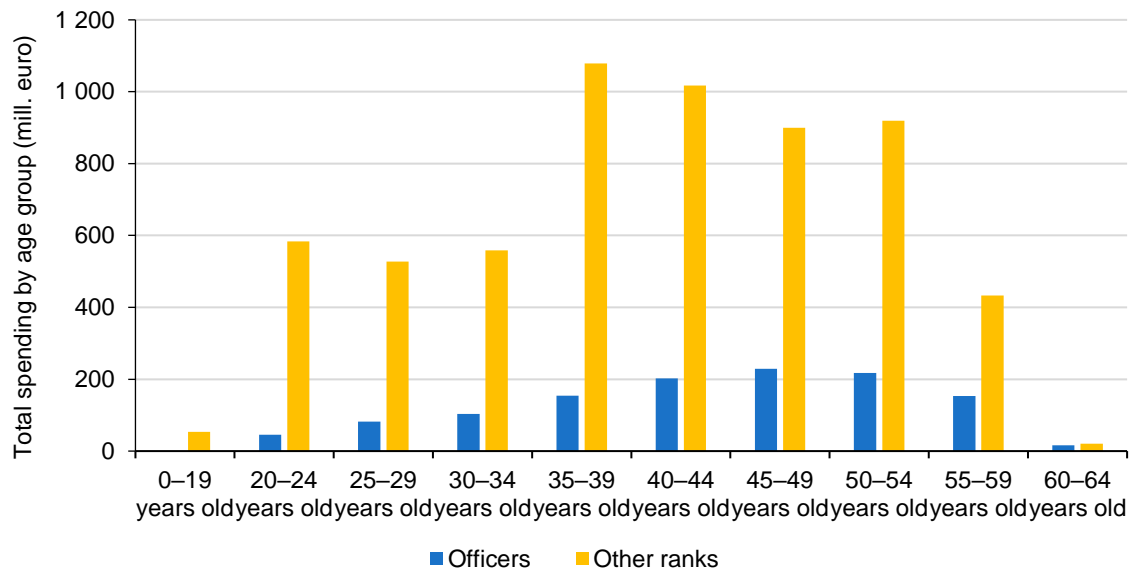


Figure 4.48 Total spending on base salary for officers and other ranks, by age group, million euro. Source: The IMOD. Note: The oldest age groups are omitted because of non-existent or very small values.

4.5.5.3 Fixed supplements

Fixed supplements make up 25.7 percent of personnel expenditures. The IMOD reports that there are twelve schemes for fixed supplements. The IMOD characterizes the system for fixed supplement as complex.

The IMOD reports the total spending on fixed supplements by age group for officers and other ranks. These numbers are shown in Figure 4.49. The average annual fixed supplements for officers, including reservists, is 21,776 euro, while for other ranks the average annual fixed supplements is 9,815 euro. In addition, it has to be noted all the above figures are gross amounts (before deduction of taxes).

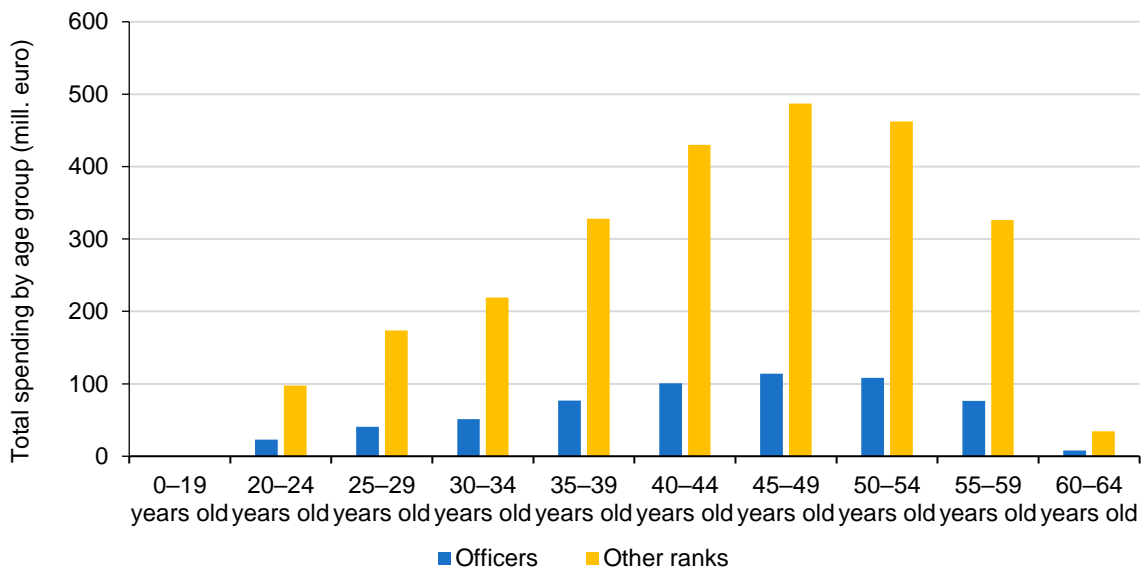


Figure 4.49 Total spending on fixed supplements for officers and other ranks, by age group, million euro. Source: The IMOD. Note: The oldest age groups are omitted because of non-existent or very small values.

The top three incentives for fixed supplements in terms of spending are the 1) Flag Officer Allowance, 2) Operational Allowance, and 3) Military Wage Adjustment. The purpose of the Flag Officer Allowance is to provide satisfactory completion of employees' career. The IMOD is highly satisfied with how this incentive achieves its purpose. The incentive has not been reformed in the past five years. The purposes of the Operational Allowance are to increase retention rates and induce more effort, while the purpose of the Military Wage Adjustment is to increase retention rates. The IMOD is satisfied with these two incentives in achieving their purposes. Both incentives have been reformed in the past five years.

The IMOD does not offer more details about the top three incentives.

4.5.5.4 Irregular supplements

Irregular supplements make up 11.2 percent of personnel expenditures. The IMOD reports that there are eleven schemes for irregular supplements. The IMOD characterizes the system of irregular supplement as complex.

The IMOD reports the total spending on irregular supplements by age group for officers and other ranks. These numbers are shown in Figure 4.50. The average annual irregular supplements for officers, including reservists, is 8,819 euro, while for other ranks the average annual irregular supplements is 4,328 euro. Note that the above figures are gross average amounts.

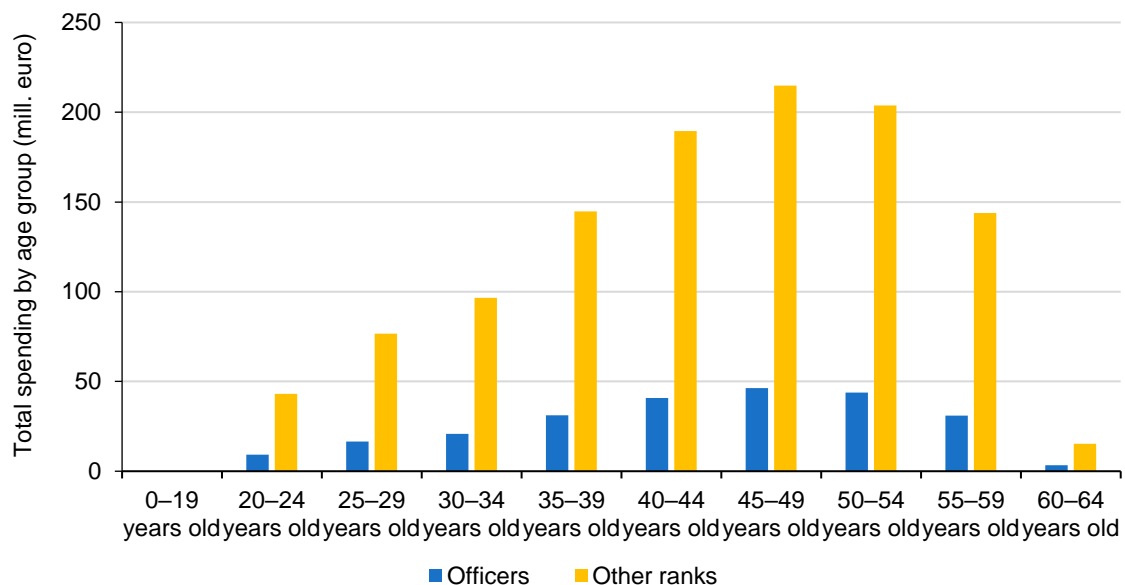


Figure 4.50 Total spending on irregular supplements for officers and other ranks, by age group, million euro. Source: The IMOD. Note: The oldest age groups are omitted because of non-existent or very small values.

The top three incentives for irregular supplements in terms of spending are the 1) Extra-Time Allowance, 2) National TDY, and 3) Guard Allowance. The purpose of the Extra-Time Allowance is to induce more effort. The IMOD is highly satisfied with how this incentive achieves its purpose. The incentive has been reformed in the past five years. The purpose of the National TDY is to incentivize deployment abroad. The IMOD has low satisfaction with how this incentive contributes to its purpose. The incentive has not been reformed in the past five years. The purpose of the Guard Allowance is to induce more effort. The IMOD is satisfied with how this incentive achieves its purpose. This incentive has not been reformed in the past five years.

The IMOD does not offer more details about the top three incentives in the system for irregular supplements.

4.5.5.5 One-time bonus payments

One-time bonuses make up 1.8 percent of personnel expenditures. The IMOD reports that it is one scheme of one-time bonus payments. The IMOD characterizes the system of one-time bonus payments as simple.

The IMOD reports the total spending on one-time bonuses by age group for officers and other ranks. These numbers are shown in Figure 4.51. The average annual one-time bonuses for officers is 334 euro, while for other ranks the average annual one-time bonuses is 836 euro. The officers only receive 4 percent of the spending on one-time bonuses, compared to 17–19 percent of base salary, fixed supplements, and irregular supplements. Further, all the above are gross figures (before deduction of taxes).

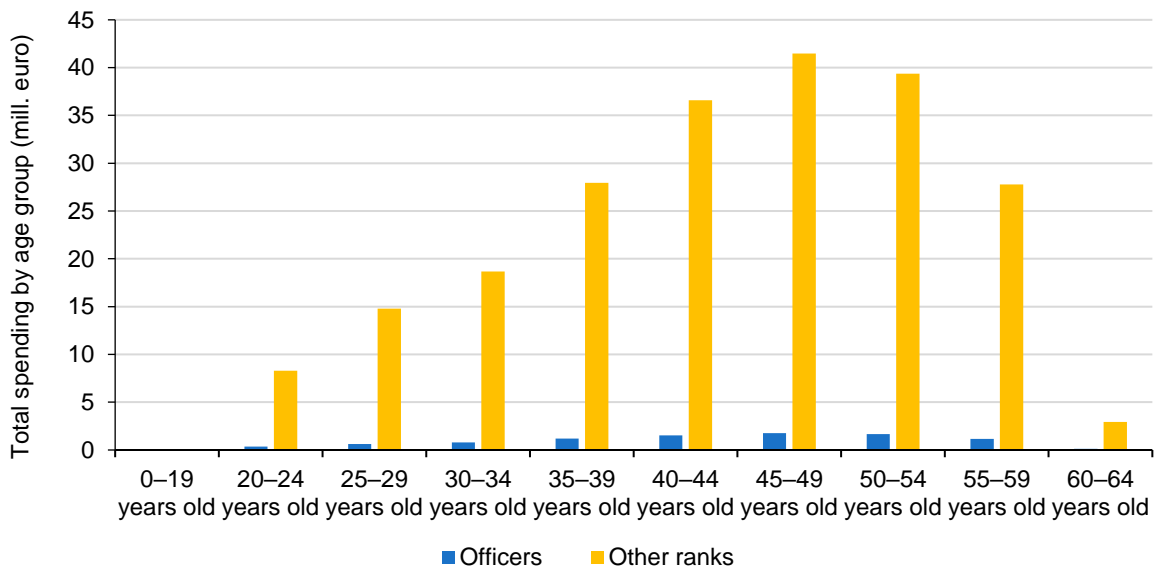


Figure 4.51 Total spending on one-time bonus payments for officers and other ranks, by age group, million euro. Source: The IMOD. Note: The oldest age groups are omitted because of non-existent or very small values.

The only incentive in the compensation category one-time bonuses is the Institutional Services Efficiency. IMOD does not report any details about this scheme.

4.5.5.6 Deployment-related payments

The IFA offers deployment-related payments to its military personnel. The IMOD does not report how many schemes that exist or information about the top three incentives in the system for deployment-related payments. The IMOD characterizes the system of deployment-related payments as simple.

4.5.5.7 Pension earnings

There are no special rules for military personnel regarding pension.

4.5.5.8 Tax exemptions

Military personnel are not eligible for tax exemptions.

4.5.5.9 Welfare services and payments

Welfare services and payments make up 1.0 percent of personnel expenditures. There are four schemes for welfare services and payments in the IFA. The IMOD characterizes this system as simple.

The IMOD reports the total spending on welfare services and payments by age group for officers and other ranks. These numbers are shown in Figure 4.52. The average annual value of welfare

services and payments is 415 euro for both officers and other ranks. The officers receive 10 percent of the spending on welfare services and payments.

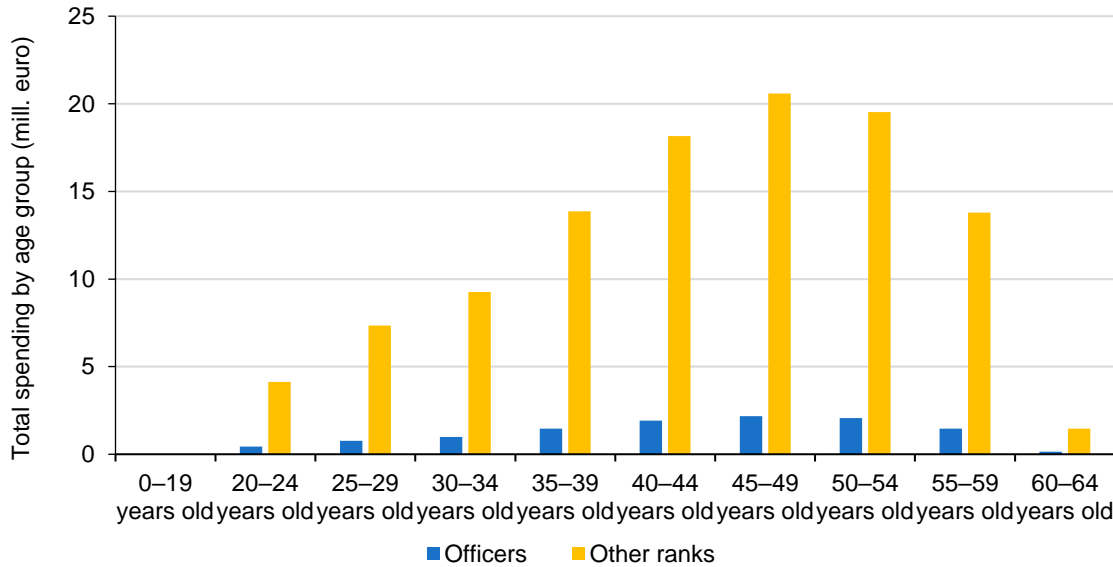


Figure 4.52 Total spending on welfare services and payments for officers and other ranks, by age group, million euro. Source: The IMOD. Note: The oldest age groups are omitted because of non-existent or very small values.

The top three incentives are the 1) Family Allowance, 2) Welfare Allowance, and 3) Injury Allowance. The purposes of the Family Allowance and the Welfare Allowance are to improve recruitment and increase retention rates. The purpose of the Injury Allowance is to increase retention rates. The IMOD reports low satisfaction with the Family Allowance’s ability to achieve its purposes, high satisfaction with the Welfare Allowance, and satisfaction with the Injury Allowance. None of the top three incentives have been reformed in the past five years.

The IMOD does not offer more details about the top three incentives in the system for welfare services and payments.

4.5.5.10 Coverage of commuting and housing expenditures

The commuting and housing expenses make up 0.9 percent of personnel expenditures. It is one scheme for the coverage of commuting and housing expenditures in the IFA. The IMOD characterizes this system as simple.

The IMOD reports the total spending on the coverage of commuting and housing expenditures by age group for officers and other ranks. These numbers are shown in Figure 4.53. The average annual value of the coverage of commuting and housing expenditures is 382 euro for both officers and other ranks. Officers receive 10 percent of the spending on the coverage of commuting and housing expenditures.

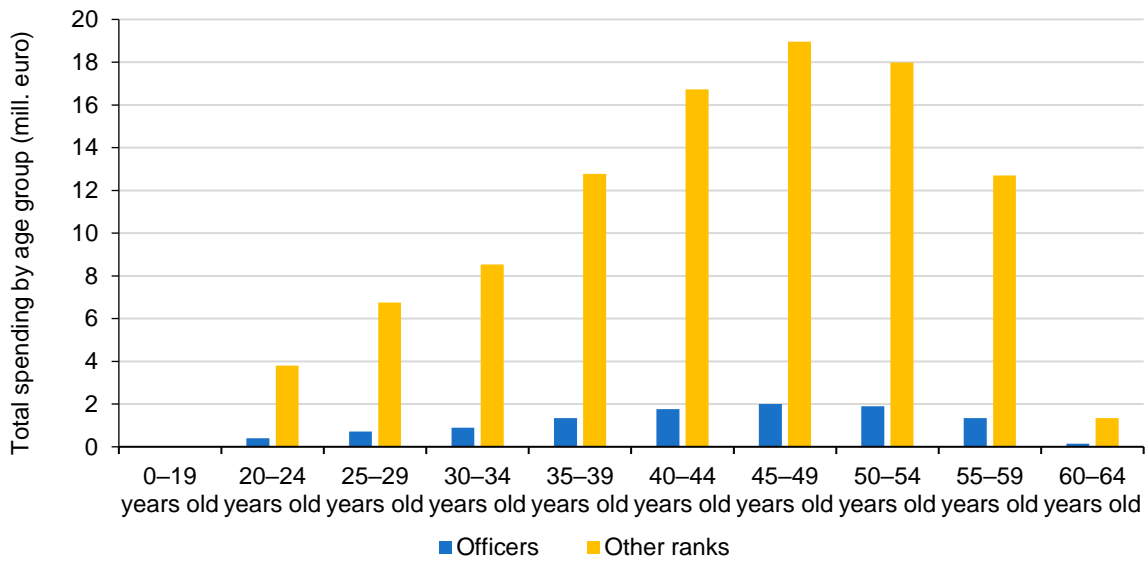


Figure 4.53 Total spending on coverage of commuting and housing expenditures for officers and other ranks, by age group, million euro. Source: The IMOD. Note: The oldest age groups are omitted because of non-existent or very small values.

The IFA has one scheme for this compensation category: 1) the Transfer Allowance. The purposes of this incentive are to improve recruitment, induce more effort, and provide satisfactory completion of employees’ careers. The IMOD is highly satisfied with how this incentive achieves its purposes. The incentive has not been reformed in the past five years.

The IMOD does not offer more details about the incentive.

4.5.5.11 Provision of civilian education

The provision of civilian education make up 0.1 percent of personnel expenditures. It is one scheme for providing military personnel with civilian education in the IFA. The IMOD characterizes this system for civilian education as simple.

The IMOD reports the total spending on civilian education by age group for officers and other ranks. These numbers are shown in Figure 4.54. The average annual value of provision of civilian education is 68 euro for officers and 31 euro for other ranks. Officers receive 19 percent of the spending on provision of civilian education.

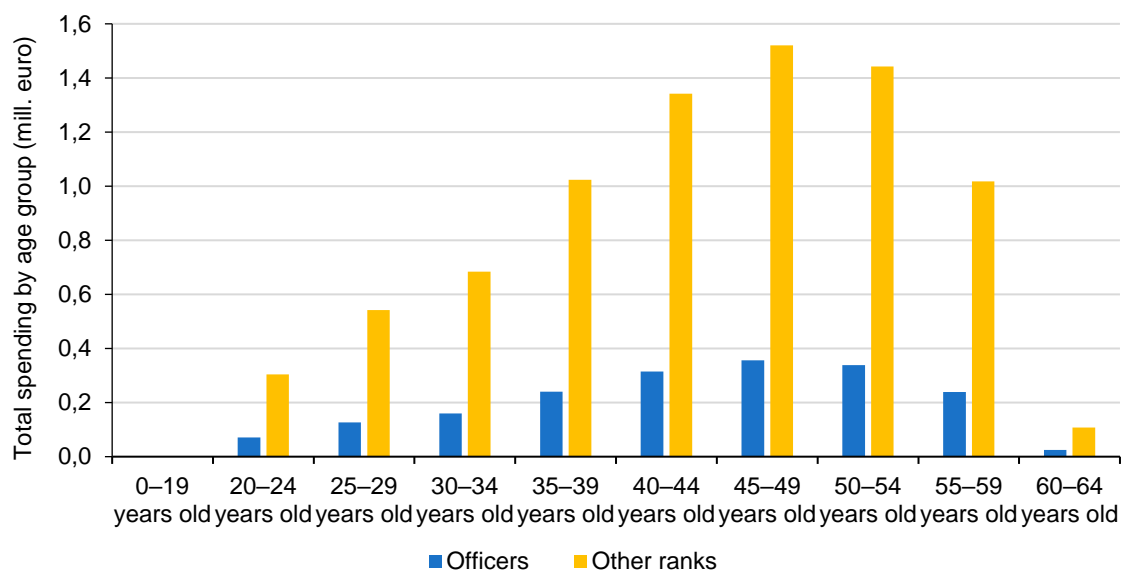


Figure 4.54 Total spending on civilian education for officers and other ranks, by age group, million euro. Source: The IMOD.

The only provision of civilian education scheme in the IFA is: 1) the Enhancement/Education Allowance. The purposes of this incentive are to increase retention rates, induce more effort, and provide for a satisfactory completion of employees' careers. The IMOD assesses the ability of this scheme to achieve its purpose as satisfactory. The scheme has not been reformed in the past five years.

4.6 Japan

4.6.1 Executive summary

Japanese defense expenditures were 42.4 billion euro in 2020, representing 1.03 percent of GDP. This is a low share – eleventh among the twelve countries studied in this report. The personnel expenditures accounted for 42.2 percent of total expenditures, ranking seventh. The military workforce is around 230,000 personnel. Sixty-two percent of the military workforce work in the Ground Self Defense Forces. Officers account for 18 percent and enlisted account for 82 percent of the military workforce. The demographics of the military workforce is relatively old in that 45 percent are less than 35 years old. Japan ranks ninth in this regard among the selection of countries. Japan has a monetary incentive system in which base salary constitutes 60 percent of total personnel expenditures while fixed supplements and one-time bonuses make up most of the remaining personnel expenditures. In terms of the share of base salary, Japan is eight out of nine countries that provided numbers for base salary. The increase in base salary by age is relatively steep for both officers and enlisted. Japan spends around 11 percent of personnel expenditures on fixed supplements, ranking sixth among the countries providing numbers for this category. Irregular supplements play a minor role in the Japanese monetary incentive system. Japan has by far the largest emphasis on one-time bonuses, in accordance with the national tradition of paying

annual or bi-annual bonuses in both the private and public sectors. The calculation formula for the estimates on one-time bonuses payments are based on base salary. The age profile of this compensation category thus has a steepness closely aligned with the one for base salary. Japan also provides coverage of commuting and housing expenses for its military employees in order to sustain high geographical mobility among its personnel. Japan has thirteen fixed supplements, four irregular supplements, two one-time bonuses, and four schemes for covering commuting and housing expenses. The overall assessment is that the Japanese monetary incentive system is a mix of complex (fixed supplements, irregular supplements) and not very complex (one-time bonus, the coverage of commuting and housing expenses) compensation categories. Japan is satisfied with all its top incentives.

4.6.2 Introduction

Japan is an archipelago of nearly 7,000 islands located on the eastern flank of the Eurasian continent. Across the Sea of Japan, Japan borders Russia, North Korea, and South Korea. The southernmost island is opposite to China (and Shanghai) across the East China Sea. Japan's total area is 377,974 km², ranking as the 63rd largest country in the world. Japan consists of 126.3 million inhabitants, ranking as the 11th largest population in the world. The population density is 346.4 inhabitants per km². In Japan, 28.4 percent of the population is 65 years and older. This is the highest share in the world.

Japan is the third largest economy in the world, with a GDP of 4,108 billion euro (538,155 billion yen) in 2020. The GDP per capita was 32,536 euro (4.3 million yen), ranking the 28th in the world. Japan is consistently ranked as the most complex economy in the world.³⁷ The main export industries in Japan are machinery and vehicles. The employment rate in Japan in 2020 was 77.7 percent among the working population, which was among the highest in the OECD.

The Japanese Self-Defense Forces (JSDF) were established in 1954. Due to the postwar Japanese Constitution (Article IX), Japan has restrictions on the use of force to settle international conflicts and cannot possess a traditional military organization. Instead, Japan maintains a strictly defensive JSDF. The U.S.-Japan Alliance was formed in 1952, and has since played a fundamental role in Japanese defense policies. The United States deploy around 55,000 U.S. service members in Japan, making it the largest contingent of U.S. forces outside the United States. The United States exercises collective self-defense with Japan, and Japan introduced a limited version of collective self-defense with allies in 2014/15.

Since 1991, the JSDF has participated in United Nations Peacekeeping Operations. Japan has been involved in 28 missions including Cambodia, Mozambique, East Timor, and Sudan.³⁸ In the aftermath of 9/11, the Maritime SDF (MSDF) was dispatched for rear-area logistical support for U.S. military operations against the Al-Qaeda. The Ground SDF (GSDF) was dispatched to Iraq in the 2004–2006 period.

³⁷ <https://atlas.cid.harvard.edu/countries/114>

³⁸ <https://www.mofa.go.jp/policy/un/pko/pdfs/contribution.pdf>

During the Cold War, Japan was primarily concerned about Soviet Union’s geopolitical ambitions and activities. In the post-Cold War period, the North Korean ballistic missiles and nuclear weapon schemes have been a primary concern for Tokyo. China’s rise as a great power in East Asia, with double-digit annual increases in military expenditure, non-transparent military build-up, and military activities in the South China Sea and East China Sea are concerning to the Japanese defense establishment. China claims sovereignty to the Senkaku islands in the East China Sea. Japan has a territorial dispute with Russia, regarding the Northern Territories, and the countries have yet to sign a WWII peace treaty. Japan also has a territorial dispute with South Korea.

The JSDF (自衛隊) consists of the GSDF (陸上自衛隊), the MSDF (海上自衛隊), and the Air Self-Defense Force (ASDF) (航空自衛隊). The Japanese Coast Guard (JCG) (海上保安庁) is not part of Japanese Ministry of Defence’s (JMOD) responsibility and is located under the jurisdiction of the Ministry of Land, Infrastructure, Transport and Tourism. The total number of employees in the JCG is about 14,500.³⁹

4.6.3 Defense expenditures

Japanese defense expenditures are estimated to be 42.4 billion euro (5,548 billion yen), representing 1.03 percent of GDP. In absolute numbers, Japan had the ninth largest defense spending globally in 2020.

The JMOD estimates that 42 percent of the total JSDF budget are spent on personnel and provision expenses. This is shown in Figure 4.55.

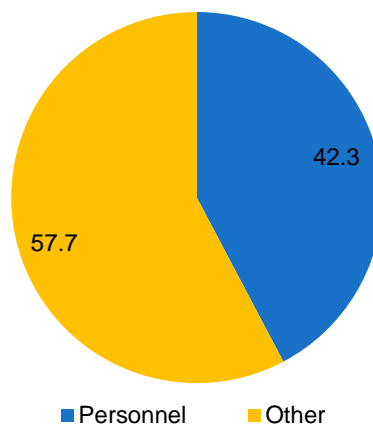


Figure 4.55 Distribution of defense expenditures, in percent. Source: https://www.mod.go.jp/en/d_act/d_budget/pdf/200330a.pdf. Note: Planned FY2020 budget. Excludes budget to U.S. Forces Japan.

In Figure 4.56, the distribution of personnel expenditures per compensation category is shown. 60 percent of the total compensation stems from base salary in the JSDF. One-time bonus

³⁹ Gathered by the JMOD through open sources.

payments constitute 26 percent. The third largest compensation category is fixed supplements, at 11 percent. The JSDF also pays irregular supplements and the coverage of commuting and housing expenses but these compensation categories are relatively small, at only 1 and 2 percent of personnel expenditures, respectively.

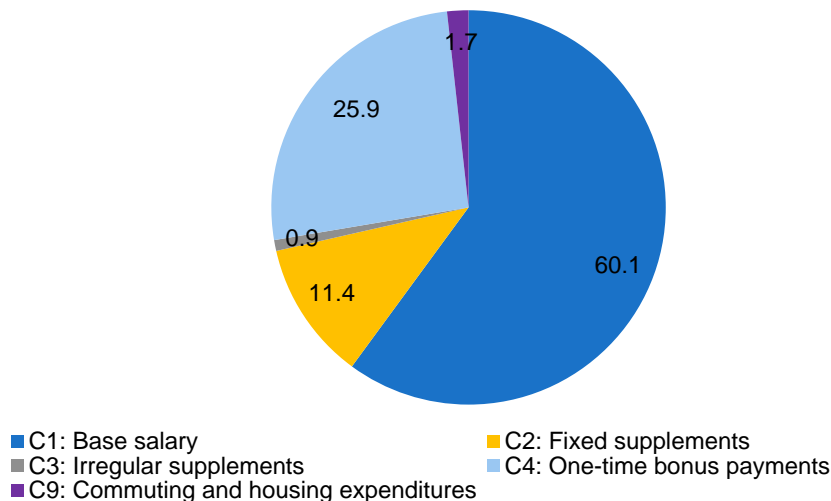


Figure 4.56 Distribution of personnel expenditures, in percent. Source: FY2019 executed budget. There are substantial differences between planned and executed budgets.

4.6.4 The personnel situation

The JSDF has 253,800 employees. The personnel structure consists of 43,100 officers, 189,800 enlisted, and 20,900 civilians. In Figure 4.57, the personnel structure is shown by branch and for officers and enlisted. The GSDF has slightly more than 60 percent of the personnel, while the MSDF and the ASDF each have slightly less than 20 percent of the personnel.

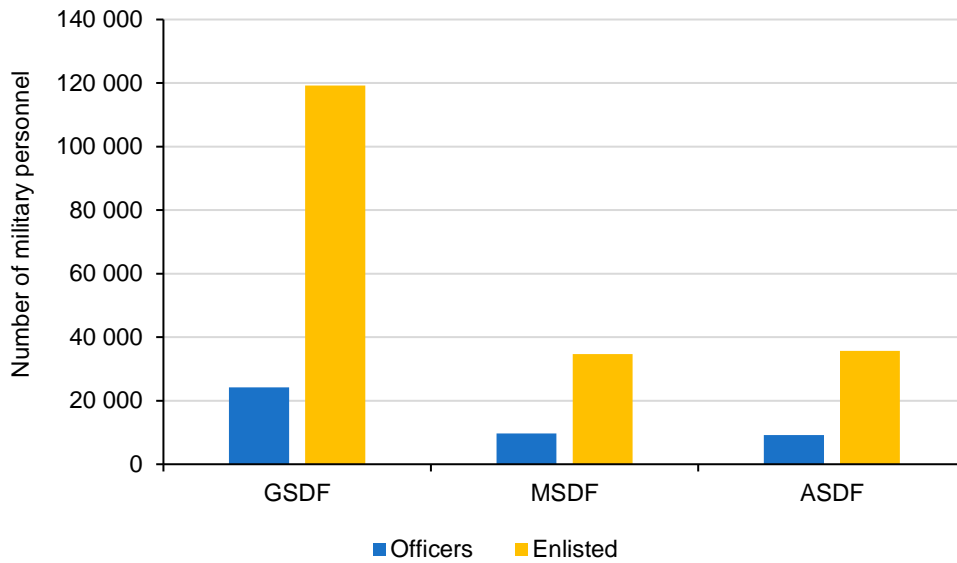


Figure 4.57 Number of officers and enlisted, by branch, in 2021. Source: The JMOD. Note: The numbers are approximates.

Figure 4.58 shows the share of officers by the three branches. A majority of the officers work in the GSDf. The MSDF and the ASDF account for 22.4 and 21.3 percent of the officers, respectively.

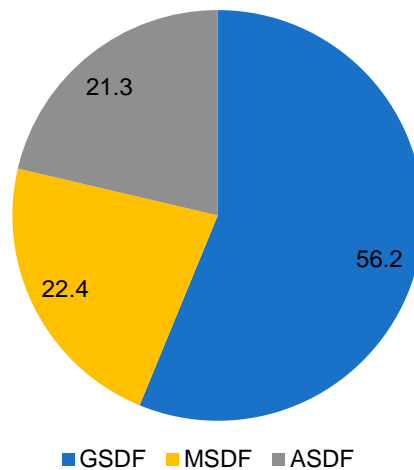


Figure 4.58 Share of officers by branch, in percent. Source: JMOD.

Figure 4.59 shows the share of enlisted by branch. The largest share of enlisted are employed in the GSDf, at 62.9 percent. The MSDF and the ASDF account for 18.3 and 18.8 percent of the enlisted, respectively.

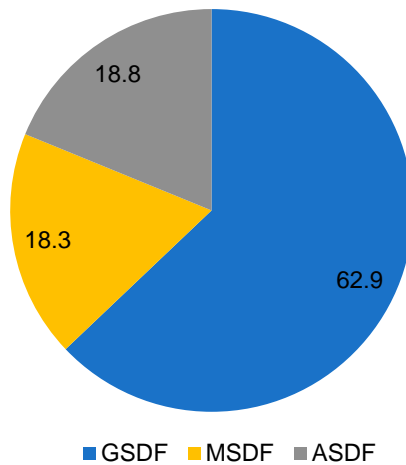


Figure 4.59 Share of enlisted by branch, in percent. Source: JMOD.

The JSDF also commands around 60,000 reservists. They have a different pay structure than the uniformed personnel, and are excluded from the rest of the study. The JSDF is based solely on professionals and as such employs no conscripts.

Figure 4.60 shows the JSDF personnel by age group for officers, enlisted, and civilians. The figure shows that a majority of the personnel is above 34 years old. About 75 percent of the officers and civilians are above 34 years old, and about 50 percent of the enlisted are above 34 years old.

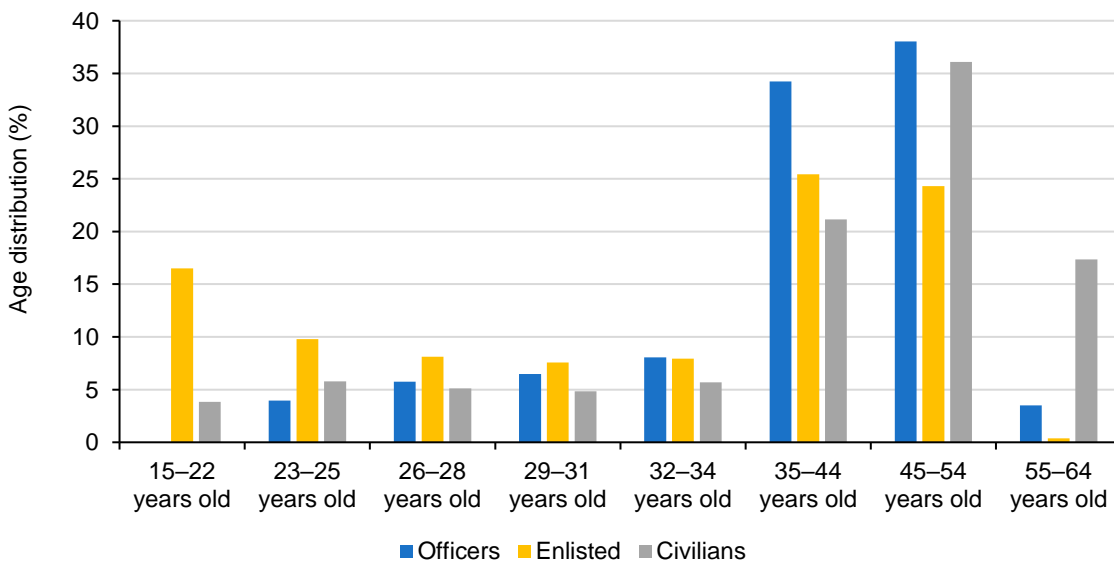


Figure 4.60 The age distribution among officers, enlisted, and civilians, in percent (each employee group sums up to 100 percent), in 2021. Source: The JMOD. Note: The numbers are approximates.

The JSDF has 700 employees deployed abroad out of 253,800 employees. All of these are uniformed personnel working as defense attaches, personnel engaging in United Nations Mission

in South Sudan, the Multinational Force & Observers in Egypt, Anti-Piracy Operations, Combined Task Force 151, and MSDF deployment in the Middle East: The Gulf of Oman, The Arabian Sea, and The Gulf of Aden. These do not count as JSDF personnel. Moreover, the JSDF does not categorize overseas deployment according to the peacetime or crisis establishment concepts.

4.6.5 Compensation categories

4.6.5.1 Data description

The JMOD provides gross expenditures on base salary, fixed supplements, irregular supplements, one-time bonus payments, and the coverage of commuting and housing expenses. The JMOD also provides average monthly figures for base salary and one-time bonuses per employee by age group, distinguishing between officers and enlisted. The JMOD does not report quantitative data for the other compensation categories. Japan provides the number and assessment of the complexity of the schemes for fixed supplements, irregular supplements, one-time bonuses and the coverage of commuting and housing expenditures. Additionally, they provide the top three incentives, satisfaction level and whether the incentives have been reformed the past five years for fixed supplement and irregular supplement. For one-time bonuses and the coverage of commuting and housing expenditures, the JMOD provides the top two incentives, satisfaction level and whether reforms have taken place the past five years.

4.6.5.2 Base salary

Base salary makes up 60.1 percent of Japanese personnel expenditures. The JSDF operates with a base salary table, which involves all ranks and with a number of steps per rank. The base salary table is equal across branches. The lowest step provides the lowest base salary for a given rank. The total number of steps per rank varies. For instance, the lowest rank – Private/Seaman Apprentice/Airman Third Class – has only nine steps; Warrant Officer has 146 steps, while the highest rank – General/Vice Admiral/General – has eight steps. The base salary for the lowest rank vary from 1,313 euro per month to 1,397 euro per month. The base salary for Warrant Officers is in the range 1,827–3,336 euro per month.

JSDF employees can increase their base salary by annual step increases and through promotions into new ranks. Every year, the personnel may increase their step in accordance with the individual personnel evaluation on January 1. The standard is a four-step increase in base salary. If an employee is promoted to a new rank, the step in the new rank will be designated by the same increase as four steps upward in the former rank. If there is no step of the same amount, then the closest step above will be applied.

The base salary for uniformed JSDF personnel includes overtime allowance pay for 21.5 hours per month, since the JSDF personnel is obliged to engage in duties at all times. The overtime allowance pay amounts to about 10 percent of the base pay.

Uniformed personnel that reside in bases are provided meals free of charge. However, they are charged 46 euro per month for the provision of food. Personnel residing outside the camps are provided 46 euro for food allowance.

The JSDF deducts payment for health care insurance contribution equal to 1.6 percent of base salary.

Figure 4.61 shows the average monthly base salary for officers and other ranks by age. The officers have higher base salary in all age groups, except for the youngest. The base salary increases with age, and the increase is steeper for officers.

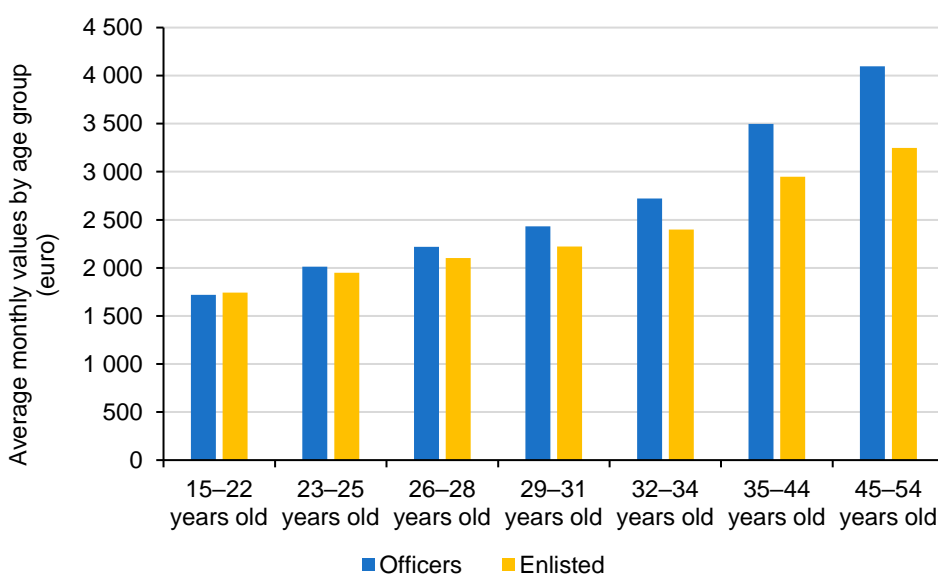


Figure 4.61 Average monthly base salary for officers and other ranks, by age group, per employee, in euro. Source: The JMOD. Note: The numbers are approximates.

4.6.5.3 Fixed supplements

Fixed supplements make up 11.4 percent of Japanese personnel expenditures. The JSDF operates with allowances for its civilian and uniformed personnel. Most of these allowances are determined in accordance with national public employees, but some additional allowances are added to the monetary incentive system for uniformed personnel due to the specific characteristics of their duties. Because the salary structure of JSDF uniformed personnel differs from national public employees, there are different rates applied to some of the allowances.

The standard allowances, which also apply but not necessarily with the exact same rates to civilians and national public employees, include End-of-Term Allowance, Diligence Allowance, Family Allowance, Housing Allowance, Commuter Allowance, Family-Unattended Transfer Allowance, Area Allowance, and Remote Area Allowance. We place End-of-Term Allowance and Diligence Allowance in the one-time bonus compensation category (Section 4.6.5.5) and Housing Allowance, Commuter Allowance, Family-Unattended Transfer Allowance, and Remote

Area Allowance in the coverage of commuting and housing expenses in Section 4.6.5.10. We discuss those allowances further there.

There are five allowances that are specific to uniformed JSDF personnel: GSDF Parachuter Allowance, GSDF Special Operation Allowance, MSDF Crewman Allowance, MSDF Special Operation Allowance, and ASDF Airman Allowance. These placement allowances compensate uniformed JSDF personnel whose duties are significantly more severe than others, e.g. pilots, crewmen, and special operation members. The compensation is calculated as a specific share of the base salary.

The JMOD reports that they have 15 schemes for fixed supplements. Since we have moved two of the supplements to cover expenses related to commuting and housing, there are 13 fixed supplements according to our definition. Examples of allowances for both public servants and JSDF personnel and JSDF-specific allowances are shown with names, eligible personnel and rates per allowance are shown in Table 4.8.

Table 4.8 Standard and JSDF-specific allowances, eligible personnel and rates, fixed supplements.

Allowance	Eligible personnel	Amount
Standard allowances		
Family Allowance	Personnel who supports dependents	Spouse: €49.6/month; Children (<22 years old): €76.3/month
Area Allowance	Personnel working in areas with comparatively high wage level of private sector	Computed by multiplying the sum of his base salary and family allowance, etc. by the rate from 3% to 20%
JSDF-specific allowances		
GSDF Parachuter Allowance	Parachuters of 1st Airborne Brigade	Basic salary * 33%
GSDF Special Operation allowance	1) Special operation member	1) Basic salary * 49.5% (first grade)
MSDF Crewman Allowance	1) Ship Crew 2) Special operation members	1) Basic salary * 33% 2) Basic salary * 45.5%
MSDF Special Operation allowance	Special operation members	Basic salary * 49.5% (first grade)
ASDF Airman Allowance	1) Fighter pilot 2) Transport airplane pilot	1) Basic salary * 80% (first grade) 2) Basic salary * 60% (first grade)

Source: JMOD.

The JMOD assesses the system of fixed supplements to be complex. The top three incentives are: 1) Area Allowance, 2) Family Allowance, and 3) MSDF Crewman. The purpose of the Area Allowance is to adjust for personnel working in areas with comparatively high wage level of private sector and costs of living. The purpose of the Family Allowance is to help JSDF personnel support dependents. The purpose of the MSDF Crewman is to compensate personnel engaging in missions under specialized environment of naval vessels.

The JMOD assesses all top three incentives to be satisfying in achieving the purpose of the schemes. All three incentives have been reformed the past 5 years.

4.6.5.4 Irregular supplements

Irregular supplements make up 0.9 percent of Japanese personnel expenditures. The JSDF offers its uniformed personnel several schemes of irregular supplements, including Special Work Allowances, Specialized Administrator Supplements, and Maritime Supplements.

The Special Work Allowances include 18 types of allowances. In Table 4.9, information on the Special Work Allowances are shown, with type of work and amount. These allowances compensate for tasks with special characteristics, e.g. dangerous, uncomfortable, unhealthy, or difficult tasks.

Special Work Allowances constitute one scheme of irregular supplements. There are three other schemes, resulting in four schemes in total. The top three schemes in the irregular supplements compensation category are: 1) Special Work Allowances, 2) Maritime Supplements, and 3) Specialized Administrator Supplements. The JMOD characterizes the system of irregular supplements to be complex.

The purpose of the Special Work Allowances is to compensate for exceedingly difficult tasks. The purpose of Maritime Supplements is to compensate personnel engaging in missions under specialized environment of naval vessels during sailing. The purpose of Specialized Administrator Supplements is to compensate for administrative and management personnel working on holidays in the case of an emergency. The JMOD assesses the top three schemes to be satisfactory in terms of achieving the purposes of the schemes. Only the Special Work Allowances scheme has been reformed the past five years among the top three schemes.

Table 4.9 Special work allowances, work type and amount, in euro.

No	Allowance	Work	Amount (euro)
1	Handling explosives	Disposal of unexploded bombs and explosives	1.9–79.4/day
		Irradiating X-ray to human body	53.4/month
2	Working on an aircraft	Working on an aircraft	9.2–38.9/day
		Working on an aircraft in a dangerous flight	4.7–26/day
3	Work under abnormal pressure	Aeronautical training in a low pressure chamber	6.9–18.3/time
		Saturated diving in a high pressure chamber	1.6–56.1/hour
		Diving with diving equipment	2.4–85.5/hour
		Work in rescue dive equipment	10.7/day
		Working in submarines for a long term	3.8–13.4/day
		Acceleration experiment for aviation medicine	6.9–16.0/day
4	Parachuting	Parachuting	21.4–96.2/time
5	Duties related to US Forces, Japan (USFJ)	Negotiations with interested parties to furnish facilities and areas to USFJ	5/day
6	Duties in the Antarctic	Transport operations in the Antarctic (south of 55 degrees latitude)	13.7–31.3/day

7	Night-time nursing	Night-time care by nurses	12.4–51.9/time
8	Snow removal	Snow removal of SDF exclusive road at night or during blizzard alert	2.3 or 3.4/day
9	Duties in Ogasawara	Duties at public authorities on Ogasawara islands	2.3–42.1/day
10	Disposal of the dead	Disposal of the dead at medical institutions or recovery of the body during disaster relief mission	7.6–24.4/day
11	Disaster dispatch	Rescue of victims in a large-scale disaster	12.4 or 24.7/day
12	Anti-air alert	Duties to cope with ballistic missiles in the open air	8.4/day
		Aircraft control and warning operations outside of the home base for a long time	4.3/day
13	Night-time special duties	Maintenance of communication equipment at night for some or all of scheduled work hours (excluding less than 2 hours of work at night)	3.7–8.4/time
14	Air control	Air control duties by authorized personnel	2.6–5.9/day
15	International emergency relief operation etc.	(a) International emergency relief operation	(a) 10.7-30.5/day
		(b) transportation of Japanese citizens overseas	(b) 57.3/day
		(c) guarding of Japanese citizens overseas	(c) 114.5/day
16	Maritime patrol operations	Special operations of security, anti-piracy and guard transportation	58.8/day
		On-the-spot inspection of unidentified ships or against piracy (except for the above cases)	15.3/day
		Duties in foreign countries to protect ships against piracy	3.1-30.5/day
		Hardship intelligence activities that contribute to the defense of Japan on board the self defense ship	8.4/day
17	Delivery care	Taking care of delivery	76.3/time
18	Infection care	Taking care of infected patients in SDF hospitals	2.2/day

Source: JMOD.

4.6.5.5 *One-time bonus payments*

One-time bonuses make up 25.9 percent of Japanese personnel expenditures. The JSDF provides two bonus schemes in the system of standard allowances that are categorized as one-time bonuses (see Section 4.6.5.3): End-of-Term Allowance and Diligence Allowance. Both schemes apply for personnel who are employed at June 1 and/or December 1 each year. The purpose of the End-of-Term Allowance is to supplement the personnel's earnings during seasons typically with increased expenditure (e.g. for vacations and travel). The amount is mostly dependent on the rank of the personnel but can be slightly adjusted based on the employees' individual performance over the last term.

The purpose of the Diligence Allowance is to reward each employee's performance over the last term. In contrast to the End-of-Term Allowance (which depends mostly on rank), the Diligence Allowance is more subject to the personnel's effort and attitude towards work.

In total, the standard amount of the two bonus schemes is 4.5 times the monthly base salary per year. Figure 4.62 shows the JMOD's estimate of the value of the two bonus allowances per year

by age group for officers and enlisted. For the youngest age group, 15–22, the bonus value is close to 8,000 euro for both officers and enlisted personnel. For the 29–31 age group, the bonus value is estimated to be on average 12,000 and 11,000 euro annually for officers and enlisted, respectively. In the oldest age group, 45–54, the annual bonus value is approximately 20,000 and 16,000 euro for officers and enlisted, respectively. The estimated average values hide variation in the value among ranks and individuals with different performance. Note also that the bonuses are primarily based on base salary, meaning that rank and step strongly determine the size of the bonus, and that age is not the relevant feature for calculating the averages.

The two bonus schemes are part of the standard allowances for national public employees. These schemes are in accordance with the national tradition of paying annual or bi-annual bonuses in both the private and public sectors.

The JMOD evaluates the two bonus schemes to be *not very complex*. The largest scheme in terms of total personnel expenditures is End-of-Term Allowance. The purpose of this bonus scheme is to supplement personnel’s costs of living. The purpose of the Diligence Allowance is to reward each employee’s achievements and performance. The JMOD characterizes both schemes as satisfactory in terms of achieving their purposes. Both schemes have been reformed the past five years.

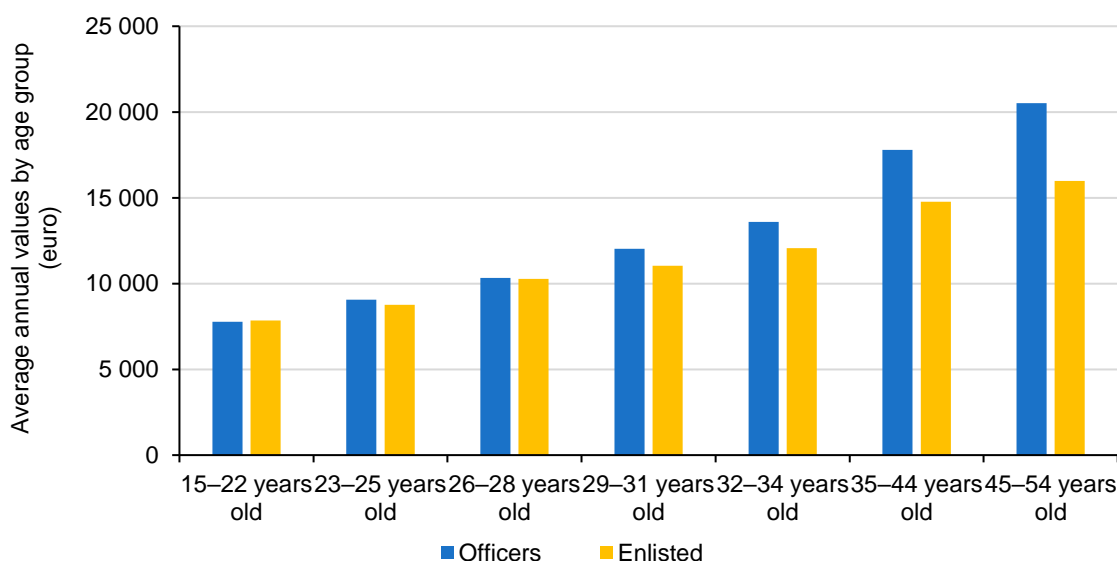


Figure 4.62 Estimated annual one-time bonus payments for officers and enlisted, by age group, per employee, in euro. Source: The JMOD. Note: The JMOD has estimated an approximate average annual bonuses by setting the bonuses for OF 5 equivalent (colonel) with a college bachelor degree at retirement age as the top bonuses for OF, and the bonuses for OR 8 (sergeant major) at retirement age as the top bonuses for OR. The average bonus level is at the highest age in the age groups.

4.6.5.6 *Deployment-related payments*

The JSDF does not operate with deployment-related payments under crisis establishment. The irregular supplement allowance International Emergency Relief Operation resembles a deployment-related payment.

4.6.5.7 *Pension earnings*

The JSDF does not provide a special pension plan for its uniformed personnel. Similar to other public officials, JSDF personnel have access to the National Pension Program, Welfare Pension Program and Voluntary Private Self-Invested portfolios.

The uniformed JSDF personnel have the same retirement age as other public officials. Uniformed personnel who retire earlier than other public officials are provided with retirement allowance for JSDF personnel under the early-age retirement system. These pension benefits are financed by the central government and not by the JMOD.

4.6.5.8 *Tax exemptions*

The JSDF does not operate with any tax exemptions for current or former employees of the JSDF.

4.6.5.9 *Welfare services and payments*

The JSDF does not provide welfare services and payments as defined under the scope of this research. While paid leaves, paid sick leaves and paid parental leaves do exist, these systems are not necessarily unique to the JSDF.

Other welfare service allowances, such as Family and Family-Unattended Transfer Allowances, are categorized under fixed supplements and coverage of commuting and housing expenses (see Sections 4.6.5.3, 4.6.5.5 and 4.6.5.10).

4.6.5.10 *Coverage of commuting and housing expenses*

The coverage of commuting and housing expenses make up at least 1.7 percent of Japanese personnel expenditures. Four of the standard allowances for JSDF personnel (uniformed and civilian) and national public employees are categorized as the coverage of commuting and housing expenses. The Housing Allowance, Commuter Allowance, Family-Unattended Transfer Allowance, and Remote Area Allowance are all targeted to improve the geographical mobility of the JSDF personnel.

The JMOD reports the expenditure on the coverage of commuting and housing expenses as 213 million euro. This contains only two of the four schemes, since we have added the other two to this compensation category. The JMOD estimates that Housing Allowance and Commuter Allowance account for 60 and 40 percent of the spending on this compensation category, respectively.

The Housing Allowance are available to personnel who rent a dwelling and pay rent in excess of 92 euro. The amount is paid in accordance with the employee's rent for the dwelling. The maximum amount of Housing Allowance is 420 euro per month.

The Commuter Allowance is provided to personnel who use public transportation or their car to work. The amount is equal to commuter pass, etc. The maximum amount of Commuter Allowance is 420 euro per month.

The Family-Unattended Transfer Allowance is provided to personnel who move and live without family members as a result of a transfer or workplace relocation. The allowance is paid in accordance with the transportation distance, using the most usually travelled route between the new residence and the spouse's. The allowance ranges in value between 229 to 763.4 euro per month.

The Remote Area Allowance is provided to personnel who are transferred to another workplace, and if the distance between the old and new workplace is at least 60 km. The allowance is calculated by multiplying the sum of the personnel's base salary and Family Allowance, etc. by a rate dependent on the distance between the workplaces. If the distance is more than 300 km, the multiplication factor is 30 percent, and if the distance is between 60 and 300 km, then the multiplication factor is five percent.

The JMOD evaluates the complexity of the two schemes – Housing Allowance and Commuter Allowance – to be not very complex. Both schemes have a purpose of increasing retention rates in the JSDF. The JMOD evaluates the schemes to be satisfactory in achieving this purpose. Both schemes have been reformed the past 5 years.

4.6.5.11 Provision of civilian education

The JSDF does not provide civilian education schemes as defined under the scope of this research. For the purpose of encouraging re-employment of veterans, the JSDF conducts vocational training for service members.

4.7 The Netherlands

4.7.1 Executive summary

Dutch defense expenditures were 11.2 billion euro in 2020, representing 1.41 percent of GDP. This is a relatively low share – eight among the twelve countries studied in this report. The personnel expenditures accounted for 48.5 percent of the total expenditures, which is a relatively high share among the studied countries, ranking third. The military workforce is close to 41,000 personnel, and 42 percent of the military workforce work in the Army. Officers account for 24 percent and other ranks account for 76 percent of the military workforce. The demographics of the military workforce is close to the median of this selection, as 55 percent of the military personnel are less than 35 years old. The Netherlands has a monetary incentive system, in which base salary constitutes 75 percent of the total personnel expenditures while fixed supplements,

irregular supplements, and the coverage of commuting and housing expenses make up most of the remaining personnel expenditures. Netherlands ranks fifth among nine countries for the share of base salary of personnel expenditures. The increase in base salary by age is relatively steep for both officers and other ranks. The Netherlands spends 12 percent of personnel expenditures on fixed supplements, ranking sixth among the countries providing numbers for this compensation category. The average payments of fixed supplements increase with age up to 35–44 for military personnel, and decrease after the 35–44 age groups. The spending share of irregular supplements is relatively low, at 4 percent of personnel expenditures. The age profile shows that younger personnel receive most irregular supplements. The Netherlands is the second largest spender on coverage of commuting and housing expenses, at six percent of personnel expenditures. Older personnel receive, on average, more of this compensation category. The overall impression is that the Netherlands finds the monetary incentive system to be complex. The Netherlands is in general satisfied or highly satisfied with how the incentives work in its armed forces. They are however not satisfied with two of the top three incentives in the compensation category for the coverage of commuting and housing expenses.

4.7.2 Introduction

The Netherlands is located in northwestern Europe with territories in the Caribbean known as the Caribbean Netherlands. The Caribbean Netherlands consists of three islands situated outside Venezuela. The Netherlands borders Germany and Belgium, and has a coastline to the North Sea. The Netherlands is the largest of the Benelux countries with a size of 41,540 km². Globally, the Netherlands ranks as 132nd by area. With a population of 17.4 million inhabitants, the Netherlands ranks as 67th globally by population. The population density is 518 per km², making it the country with the second highest population density in Europe. In the Netherlands, 20 percent of the population is 65 years and older. This is the 21st highest share in the world.

The Dutch GDP was 800 billion euro in 2020, ranking 17th in the world. The GDP per capita was 45,873 euro, ranking 14th in the world. The Netherlands ranks as the 28th most complex economy. The country is as complex as expected for its income level. The Netherlands is one of the world's top agricultural exporter. Other major industries are the energy industry, the chemical industry, the metallurgy industry, and tourism. The employment rate in the Netherlands is the highest among the countries we study in this report. It is 79.3 percent, which is 13.3 percentage points above the OECD average.

The Netherlands has a long history with NATO as a founding member of the Alliance. In recent decades, the Netherlands has supported NATO in several operations. Missions in Afghanistan, Kosovo, and Mali are some of them. About nine percent of the military personnel are deployed abroad. The largest deployments as of 2021 are in Lithuania and Iraq.⁴⁰

Historically, the Netherlands has been a global power with colonies and trade stations in countries now known as Indonesia, South Africa, Sri Lanka and New Guinea, among others. Today, the Netherlands rules over the Caribbean Netherlands. The Netherlands has no territorial disputes. In

⁴⁰ <https://www.government.nl/topics/international-peace-and-security/the-netherlands-military-missions>

open assessments of state security, the Ministry of Justice and Security points to cybersecurity and terrorism as risks to national security.⁴¹

The Netherlands Armed Forces (NLAf) consist of the Royal Netherlands Army (*Koninklijke Landmacht*), Royal Netherlands Navy (*Koninklijke Marine*), Royal Netherlands Air Force (*Koninklijke Luchtmacht*), and the Royal Netherlands Marechaussee (*Koninklijke Marechaussee*). The latter is a national gendarmerie force with both military and civilian police duties. The Navy manages the Netherlands Coastguard and the Dutch Caribbean Coast Guard. These coastguards are civilian forces. The Navy also includes the Netherlands Marine Corps (*Korps Mariniers*), which is an elite naval infantry corps.

4.7.3 Defense expenditures

The Dutch defense expenditures were 11,249 million euro in 2020. This makes up 1.41 percent of GDP in the Netherlands.⁴² The share of GDP spent on national defense has increased from around 1.15 percent of GDP in the years 2014–2017 to 1.41 percent in 2020. In 2022, the estimated share is 1.65 percent.⁴³ In 2020, the Netherlands had the 20th highest military spending globally in absolute numbers.

NATO reports the distribution of the defense expenditures on various components. Figure 4.63 shows the distribution. Personnel expenditures are the largest component in the Dutch defense expenditures, at 48.5 percent of the spending. The figure also shows that equipment, infrastructure, and other components make up 22.1, 3.1, and 26.2 percent of the expenditures, respectively.

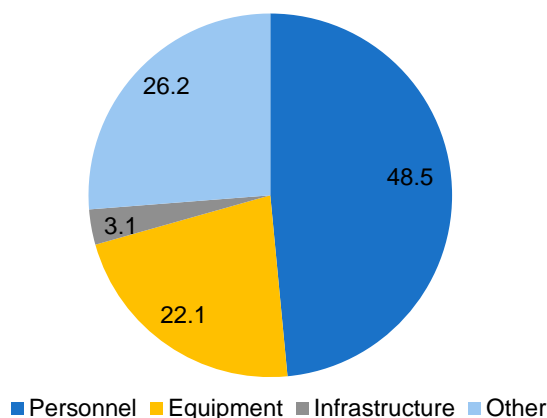


Figure 4.63 Distribution of defense expenditures, in percent. Source: NATO.

The Dutch Ministry of Defence (DMD) has reported the distribution of personnel expenditures on the various compensation categories. This is shown in Figure 4.64. Base salary is by far the

⁴¹ <https://english.nctv.nl/>

⁴² We use OECD data on GDP and not directly from the Netherlands in order to be consistent across countries. This number is exactly the same as NATO reports.

⁴³ https://www.nato.int/cps/en/natohq/news_197050.htm

largest part of personnel expenditures, at 68.7 percent. The remaining 31.3 percent is spent on fixed supplements, irregular supplements, one-time bonus payments, pension earnings, the coverage of commuting and housing expenditures, and the provision of civilian education. Fixed supplements account for 11.2 percent and pension earnings account for 8.5 percent of the personnel expenditures. The welfare services and payments compensation category is excluded from the figure, because the reported total amount was negative.

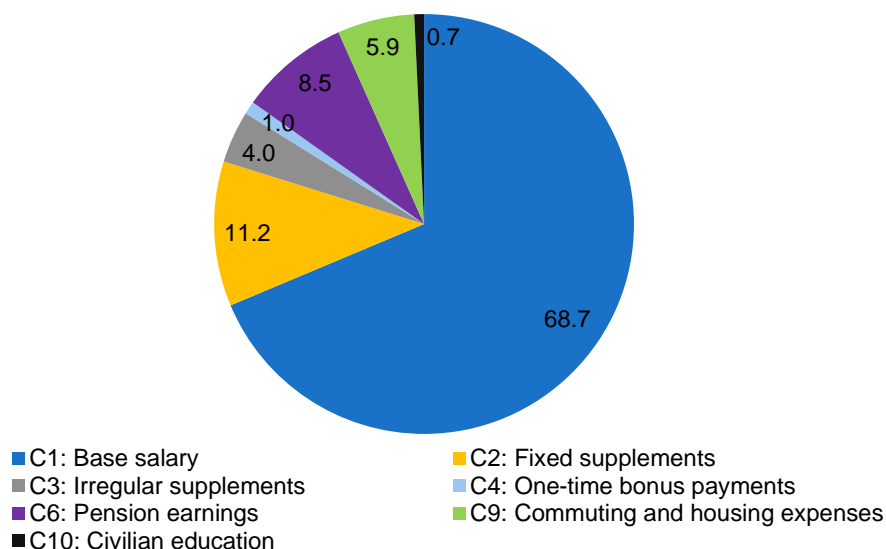


Figure 4.64 Distribution of personnel expenditures, in percent. Source: The DMD.

4.7.4 The personnel situation

There are 9,903 officers, 31,052 other ranks, and 20,114 civilians in the Netherlands Armed Forces (NLAF). In addition, NLAF has a reserve force of 6,372 reservists. The Netherlands does not have a conscription system. There are 9,903 officers, 31,052 other ranks, and 20,114 civilians in NLAF as of 31.12.2020.

In Figure 4.65, the number of officers and other ranks is shown by branch. The Army, the Navy, and the Air Force have 19,898, 8,592, and 7,256 military personnel, respectively. In addition, there are 11,581 military personnel in other defense institutions within the NLAF.

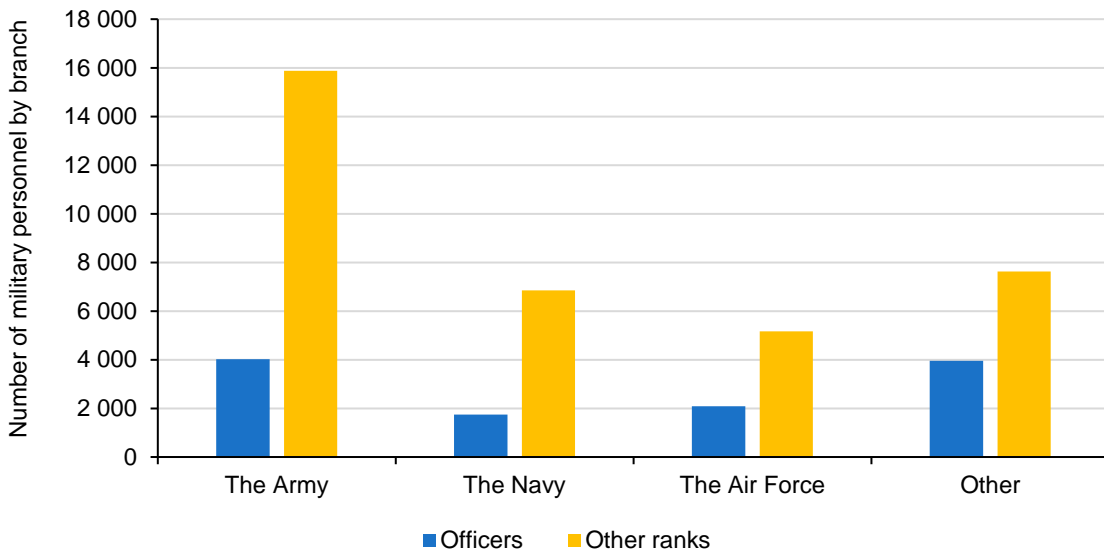


Figure 4.65 Number of military personnel, by branch and defense institutions, officers and other ranks. Source: The DMD. Reservists are included in the numbers.

In Figure 4.66, the shares of officers by branch and other institution are shown. Reservists are included. Thirty-four percent of the officers work in the Army. The Navy and the Air Force employ 14.8 and 17.7 percent of the officers. Other defense institutions account for 33.5 percent of the officers.

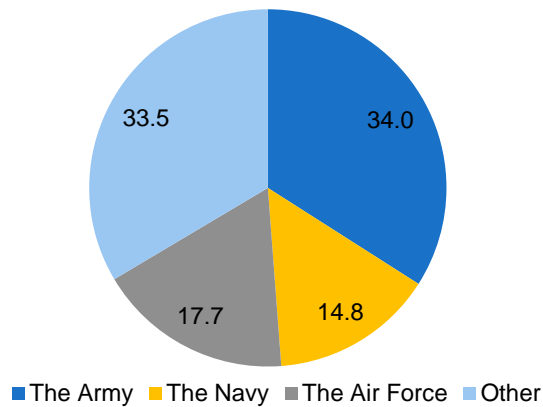


Figure 4.66 Share of officers, by branch and defense institution, in percent. Source: The DMD.

Figure 4.67 shows the distribution of other ranks by branch and other defense institution. Forty-five percent of the other ranks are employed in the Army. The Navy and the Air Force account for 19.3 and 14.6 percent of other ranks, respectively. The rest of the other ranks, 21.5 percent, work in other defense institutions.

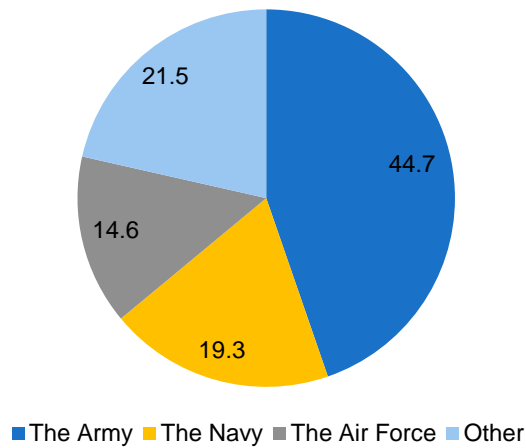


Figure 4.67 Share of other ranks, by branch and defense institution, in percent. Source: The DMD.

Figure 4.68 shows the overall age distribution of officers, other ranks, and civilians. Twenty-nine percent of the officers are under 35 years old, and 49 percent are over 44 years old. Among other ranks, 63 percent are under 35 years old, and 20 percent are over 44 years old. Seventeen percent of civilians are under 35 years old, and 61 percent are over 44 years old.

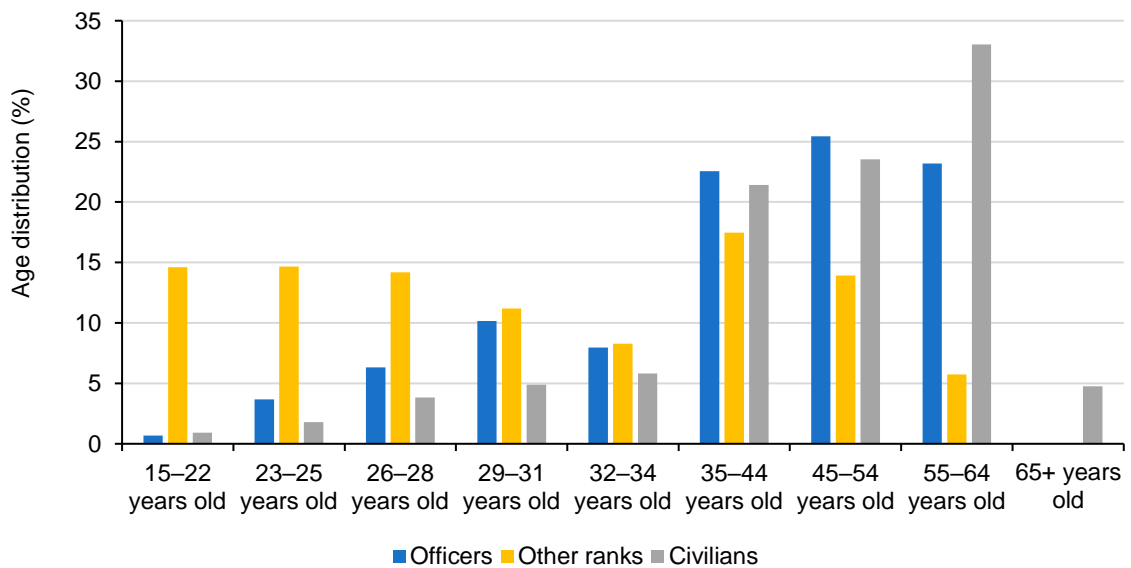


Figure 4.68 The age distribution among the officers, other ranks, and civilians, in percent (each employee group sums up to 100 percent). Source: The DMD.

The NLAF has deployed military forces abroad, including to missions in Afghanistan, Kosovo, and Mali. About nine percent of the military personnel have placements abroad. The largest deployments as of 2021 are in Lithuania and Iraq.⁴⁴

4.7.5 Compensation categories

4.7.5.1 Data description

The DMD reported average annual values for each age group, per employee or per recipient, in the RFI. We do not know whether the values for the compensation categories, that target specific subsets of the military workforce, are provided per employee or per recipient. The DMD provided an assessment of the complexity of the following compensation categories: fixed supplements, irregular supplements, one-time bonuses, deployment-related payments, pension earnings, welfare services and payments, the coverage of commuting and housing expenditures, and the provision of civilian education. Additionally, the DMD provided the top three incentives of fixed supplements, irregular supplements, one-time bonuses, deployment-related payments, the coverage of commuting and housing expenditures, and the top one incentive of the provision of civilian education. The DMD provides its satisfaction level with nearly all incentives, and whether these incentives have been reformed the past five years.

4.7.5.2 Base salary

Base salary accounts for 69 percent of NLAF's total personnel expenditures. In the Netherlands, wage setting is determined by collective bargaining agreements. The defense sector is unique in that the DMD negotiates with its own unions, separately from the rest of the public sector. Base salary is determined by rank and seniority. The earning of a higher rank translates into a higher base salary.

In Figure 4.69, the annual base salary in euro for officers and other ranks in the NLAF is shown. The base salary increases steadily by age group for both officers and other ranks. Officers have a steeper increase than other ranks.

⁴⁴ <https://www.government.nl/topics/international-peace-and-security/the-netherlands-military-missions>

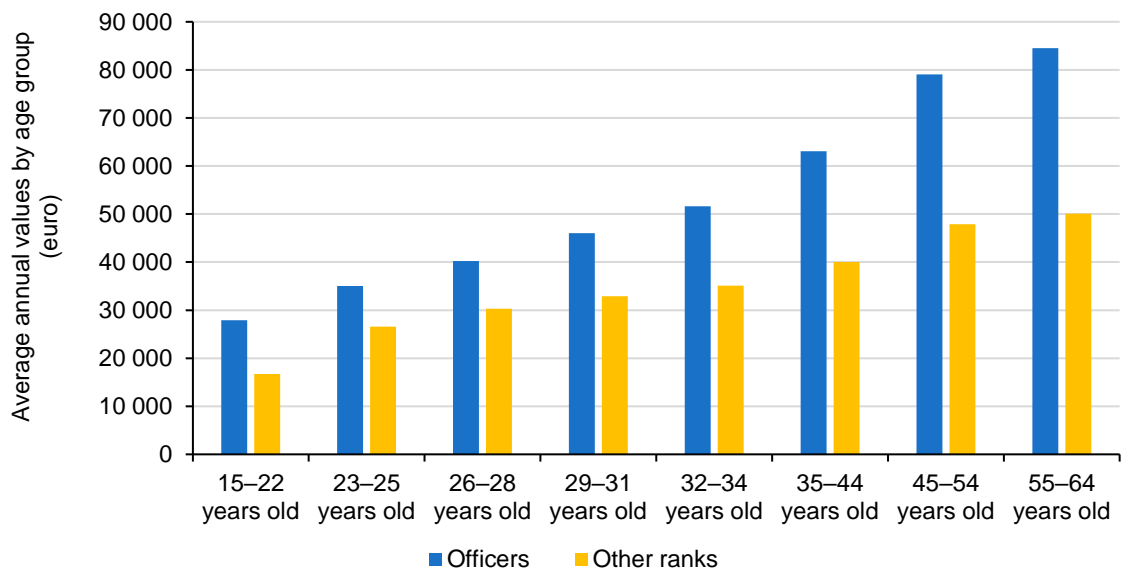


Figure 4.69 Average annual base salary for officers and other ranks, by age group, per employee, in euro. Source: The DMD. Note: The oldest age group, 65+, is omitted from the figure.

4.7.5.3 Fixed supplements

Fixed supplements make up 11 percent of NLAf’s personnel expenditures. The DMD did not state the number of schemes for fixed supplements. The DMD assessed the system of fixed supplements to be complex.

Figure 4.70 presents the average annual fixed supplement for officers and other ranks by age group. The figure shows that young personnel, in the age groups up to 31 years old, receive less fixed supplements compared to older personnel. The age groups 32–34, 35–44, and 45–54 receive the largest amounts of fixed supplements. This holds for both officers and other ranks.

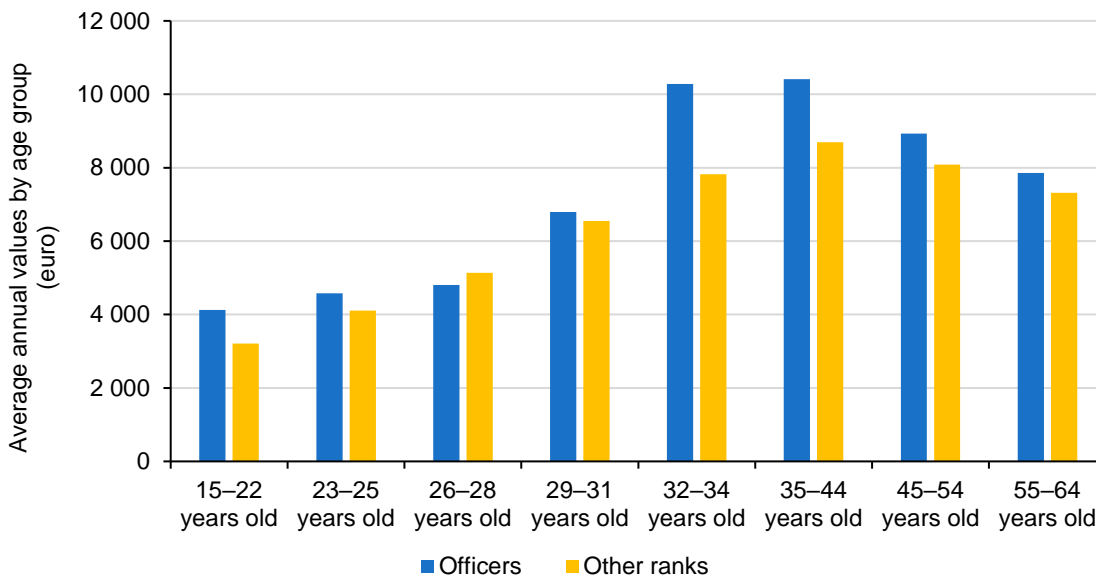


Figure 4.70 Average annual fixed supplements for officers and other ranks, by age group, per employee/recipient, in euro. Source: The DMD. Note: The oldest age group, 65+, is omitted from the figure.

The top three incentives among the fixed supplements are the following: 1) Fixed Extra Overtime Compensation, 2) Allowance for Medical Staff, and 3) Allowance for Pilots. The purpose of the Fixed Extra Overtime Compensation is to incentivize deployment abroad. The purposes of the two other incentives are to improve recruitment, increase retention rates, induce more effort, and provide a satisfactory completion of employees' careers. The DMD is highly satisfied with how these three incentives achieve their purposes. None of the schemes has been reformed the past five years.

Fixed Extra Overtime Compensation is a fixed additional allowance that all military personnel in the NLAF receive on top of the base salary. This allowance compensates for the extra workload associated with being a soldier. Examples of extra workload compensated by the Fixed Extra Overtime Compensation are reasonable overtime, distress of being moved to another work location, constant availability, the chance of high risks at the job, not being able to strike etc. The compensation reasons show that there is geographical mobility aspect to the allowance. Pure allowances for geographical mobility are placed in the coverage of commuting and housing expenses compensation category in Section 4.7.5.10.

Allowance for Medical Staff and Allowance for Pilots are fixed supplements provided to personnel from these professions. The purposes are to recruit and retain personnel with these qualifications. The need for specific fixed supplements for these professions is that they have a great opportunities in the civilian sector. The NLAF provide these compensations to be more competitive in the labor market.

4.7.5.4 Irregular supplements

Irregular supplements make up 4 percent of all personnel expenditures in NLAF. The DMD does not provide the number of schemes for irregular compensation in the monetary incentive system. The DMD assesses the system of irregular supplements to be complex.

In Figure 4.71, the average annual irregular supplements per age group for officers and other ranks are shown. Irregular supplements are on average relatively high for personnel in their 20s. Personnel in their 30s receive larger amounts of irregular supplements compared to older personnel. On average, other ranks receive higher amounts of irregular supplements compared to officers.

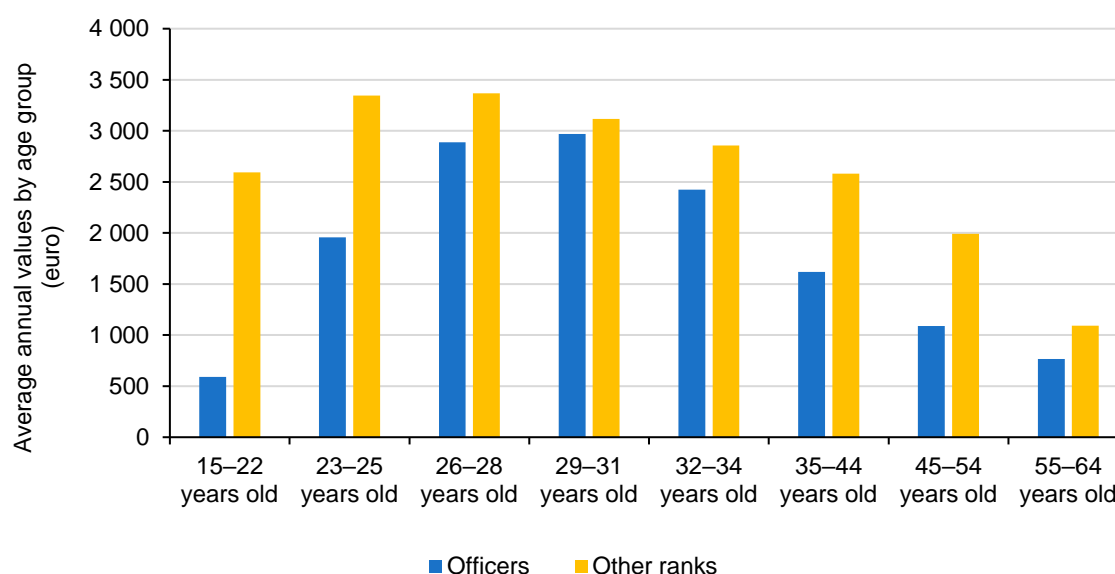


Figure 4.71 Average annual irregular supplements for officers and other ranks, by age group, per employee/recipient, in euro. Source: The DMD. Note: The oldest age group, 65+, is omitted from the figure.

The irregular supplements with the largest total payments are usually given to compensate for unusual working hours, exercises and missions. Unusual working hours are defined as any mandatory work other than Monday to Friday between 07:00 and 18:00.

The DMD reported four irregular supplements. These are: 1) Exercise Compensation for Multi-Day Activities During Weekdays (Exercise Weekday Compensation), 2) Compensation for Missions (Mission Compensation), 3) Exercise Compensation for (Multi-)Day Activities During Weekends and Holidays (Exercise Weekend/Holiday Compensation), and 4) Guard Services: Compensation for Irregular Shifts During Weekdays (TOD). The DMD states that the purpose of the first three irregular supplements is to incentivize deployment abroad. The DMD assesses these incentives to be satisfactory in their achievement of this purpose. None of the first three incentives have been reformed the past five years.

Exercise Weekday Compensation, Mission Compensation, and Exercise Weekend/Holiday Compensation are irregular supplements that compensate military personnel for day-to-day exercise on weekdays, missions, and day-to-day exercise on the weekends or during holidays, respectively. The compensation is a fixed amount per day. Financial compensation is given when the employee cannot take a leave or wishes to be compensated with money instead of leisure.

The TOD is a compensation for guard services outside of ordinary work hours. Personnel receives one point per day for service outside ordinary work hours. The range of value of the TOD is at a maximum for the rank of Major. Personnel with ranks higher than Major do not receive this compensation. The compensation is a fixed amount (by means of a bracket system) per month depending on the rank and the point count.

4.7.5.5 One-time bonus payments

One-time bonus payments make up a small part of total personnel expenditures – one percent. The DMD does not state how many schemes for one-time bonus payments that are in place in the monetary incentive system. The DMD assesses the system for one-time bonuses to be simple.

In Figure 4.72, the average annual one-time bonus payments by age groups for officers and other ranks are shown. On average, officers receive more one-time bonus than other ranks. The largest average amounts are provided to the age groups 45–54 and 55–64 years old.

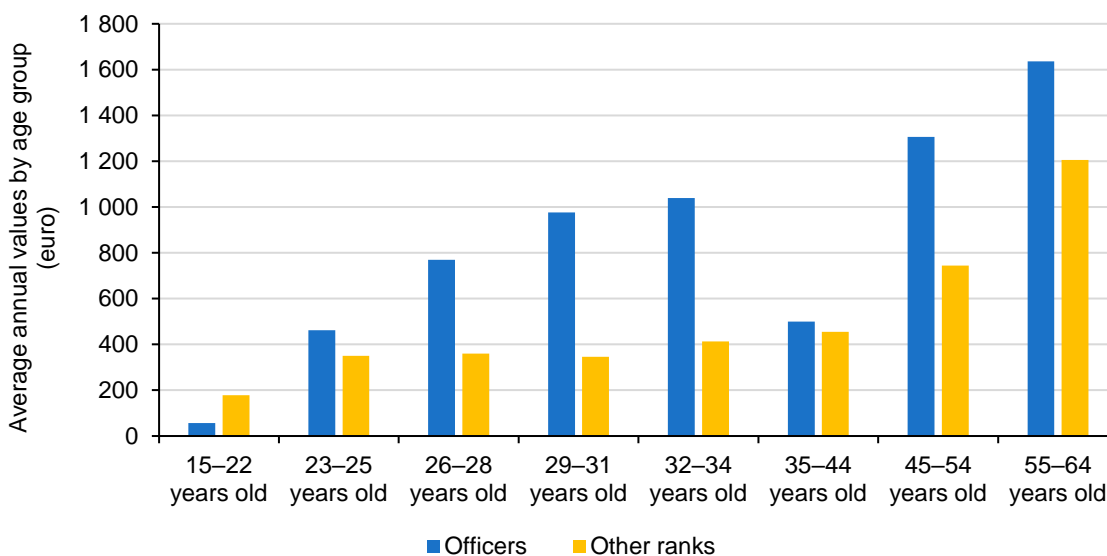


Figure 4.72 Average annual one-time bonus payments for officers and other ranks, by age group, per employee/recipient, in euro. Source: The DMD. Note: The oldest age group – 65+ years old – is omitted from the figure.

The top three schemes for one-time bonus payments are the 1) Years of Service, 2) Appointment Bonus, and 3) Special Allowance. The purposes of Years of Service are to increase retention rates and provide satisfactory completion of employees’ careers. The DMD is highly satisfied with this incentive’s ability to achieve its purposes. The purposes of the Appointment Bonus are to improve

recruitment, to increase retention rates, to incentivize deployment abroad, and to provide satisfactory completion of employees' careers. The DMD is also highly satisfied with the Appointment Bonus' ability to achieve its purposes. The purposes of the Special Allowance are to improve recruitment, increase retention rates, and incentivize deployment abroad. The DMD assesses this incentive to be satisfactory in reaching these purposes. None of the top three incentives have been reformed the past five years.

The Years of Service is a service time bonus awarded to military personnel as a retention bonus for 12.5, 25 and 35 years of service. At each of these chronological "milestones" in their careers, the employees receive a lump-sum equal to the gross salary. The Years of Service is not taxable.

Appointment Bonus is a lump-sum bonus paid to eligible personnel. The Appointment Bonus' amount depends on the position and the duration of the service obligation. The Appointment Bonus is taxed at a special rate. Soldiers can request an advance of 50 percent of the Appointment Bonus after the completion of their initial training. The other 50 percent will be paid out after the service obligation period.

Special Allowance is a one-off allowance that is paid to employees showing exceptional results or sacrifices. The bonus can be given to military personnel with unusual costs of service, or as a one-time bonus for special performances. The Special Allowance is not like the other bonus schemes that have strict rules for timing and size of the bonus.

4.7.5.6 Deployment-related payments

The DMD does not report how many schemes of deployment-related payments that are in place for military personnel in the NLAF. The DMD assesses the system of deployment-related payments to be not very complex.

Figure 4.73 shows the average annual deployment-related payments for military personnel operating abroad in the NLAF. The payments are higher for older age groups, and slightly higher for officers compared to other ranks.

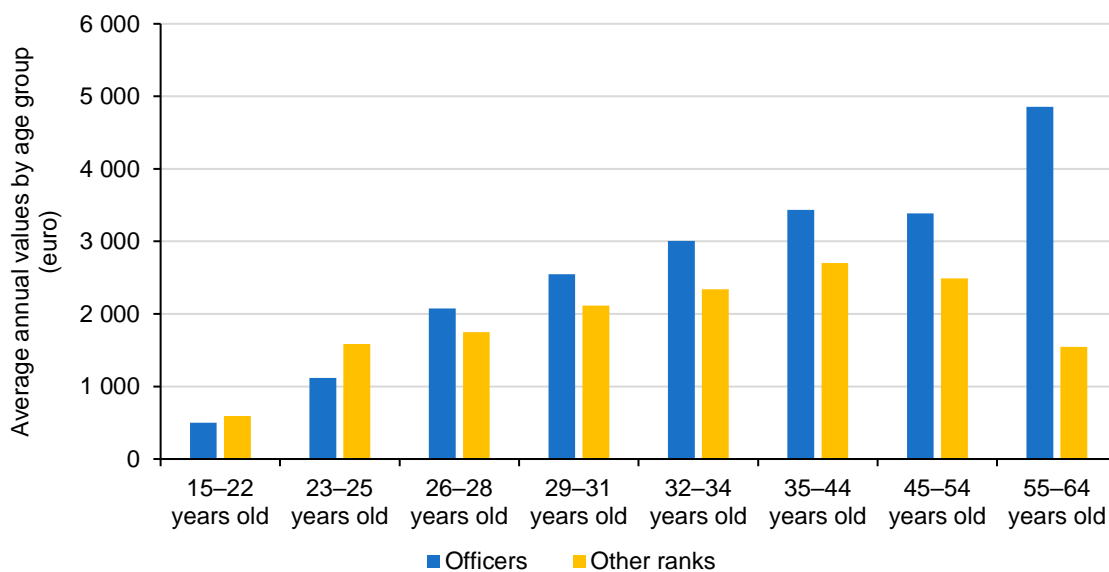


Figure 4.73 Average annual deployment-related payments for officers and other ranks, by age group, per employee/recipient, in euro. Source: The DMD. Note: The oldest age group – 65+ years old – is omitted from the figure.

The top three deployment-related payments are the 1) Taxed Allowance Serving Abroad, 2) Tax-Free Allowance Serving Abroad, and 3) Other. The purpose of the two first is to incentivize deployment abroad. The third incentive has no reported purpose. The DMD is satisfied with how the two first incentives achieve their purpose. The DMD has no answer concerning the satisfaction of Other. None of the three incentives have been reformed the past five years.

Taxed Allowance Serving Abroad is a compensation for the extra workload during deployment abroad. The dispatched employees receive the Facilities for Peace and Humanitarian Operations.

Tax-Free Allowance Serving Abroad is an allowance paid by the DMD as long as the ministry is not providing for common costs, e.g., communication costs, washing clothes, local transport, and accommodation costs.

Other is a set of payments that the DMD may pay deployed personnel, such as food costs, car, and furniture.

4.7.5.7 Pension earnings

Military personnel in the NLAF are subject to two pension systems. First, they are enrolled in the standard pension system. This system consists of three pillars: base pension paid by the state, additional payments by the employer and employees, and private insurance savings. Military personnel receive the base pension and additional payments. The NLAF pays 70 percent of the additional payments, while the military personnel pay their share of 30 percent.

Second, military personnel has a specific pension system to take care of their early retirement age. The Former Military Personnel Benefits Act makes provision for a bridging benefit for the period

between the age-related retirement of military personnel and their old-age pension. The benefit amounts to 73 percent of the last-earned wage. These benefits are charged to the defense budget.

For all military personnel, age dismissal is granted five years before reaching the state pension age based on the General Old Age Pensions Act. For a number of groups of military, it is possible, as a transitional measure, to opt for the old service scheme.

Until 2017, the old service scheme applied. Under the old service scheme, there was an age dismissal at 60 years. In practice, age dismissal is granted even earlier, because of a transitional provision on age dismissal applies to military personnel who were appointed to the professional personnel for an indefinite period before 1 January 2002. Navy personnel traditionally had an earlier age dismissal.

Altogether, the DMD assesses the pension earnings compensation category system as complex.

In Figure 4.74, the average annual pension earnings for officers and other ranks by age group are shown. The average amount increases by age for both officers and other ranks. Officers earn a higher value of pension earnings compared to other ranks.

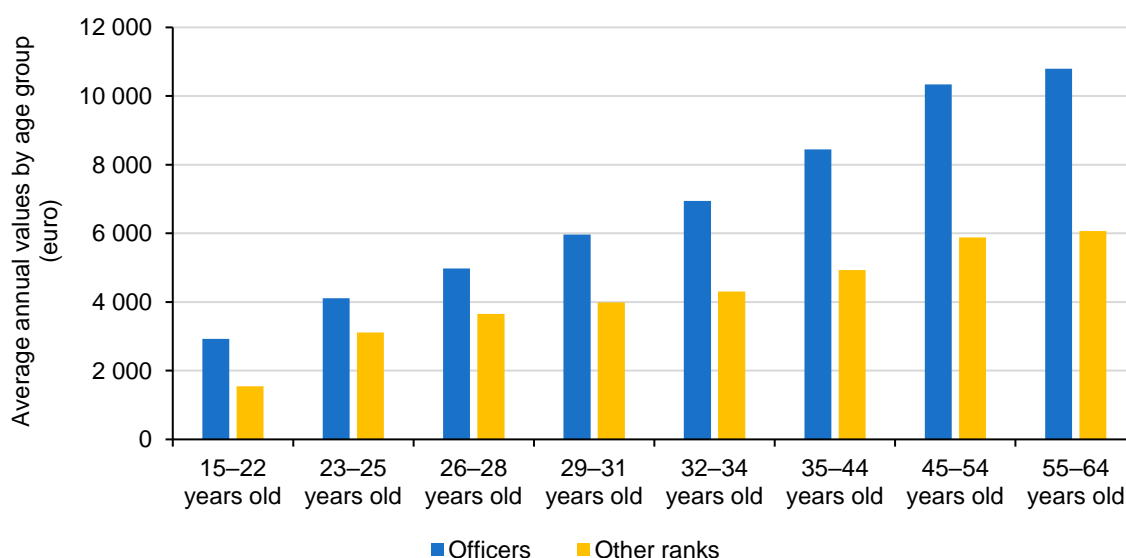


Figure 4.74 Average annual pension earnings for officers and other ranks, by age group, per employee, in euro. Source: The DMD. Note: The oldest age group – 65+ years old – is omitted from the figure.

4.7.5.8 Tax exemptions

Special tax exemptions for military personnel are not used in the Netherlands.

4.7.5.9 Welfare services and payments

Military personnel on active duty are legally obliged to use the care provision system that the DMD keeps under its own management. This separate position is inspired by the constitutional obligation of the DMD to have sufficient numbers of personnel available for immediate deployment at all times. As a result, insight into the health status of these soldiers is essential.

Care due to military deployment is paid by the DMD. It is mandatory for military personnel to use the military medical services. At the same time, they are exempt from the Healthcare Insurance Act (*Zorgverzekeringswet*). For this insurance, they pay an income-related contribution and the DMD pays an employer contribution.

The DMD reports a negative value for welfare services and payments for the military personnel. This probably takes into account the personnel's out-of-pocket payments. The DMD also pays for a share of the welfare services. The provision of health care, dental care, etc. has a positive value for the personnel.

4.7.5.10 Coverage of commuting and housing expenditures

The compensation category of coverage of commuting and housing expenditures constitute 5.9 percent of the NLAF's total personnel expenditures. The DMD does not report how many schemes of this compensation category that are in place. The DMD states that the system is not very complex.

Defense employees can apply for housing and coverage of commuting- and food expenditures. The criteria for qualifying for these allowances are many and often quite detailed. Most criteria are linked to either postings on locations far from home or work at unusual hours.

Figure 4.75 shows that the average annual reimbursements and coverage for commuting and housing are between 2 000 and 5 000 euro for all age groups and types of military personnel, with the exception of the oldest age group. The actual payments vary a lot between each employee, depending on working location.

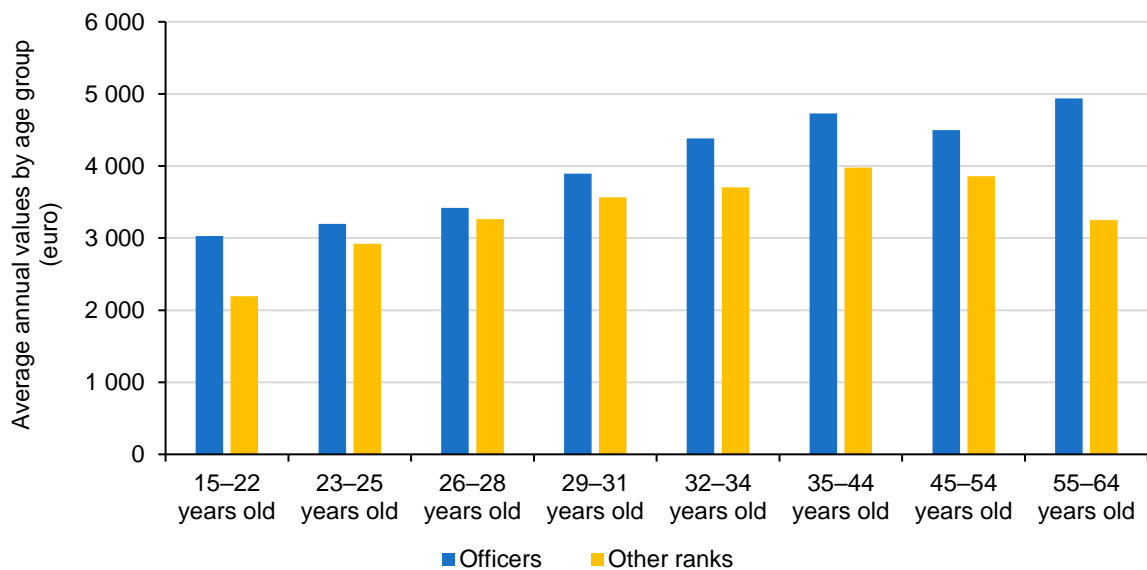


Figure 4.75 Average annual coverage of commuting and housing expenditures for officers and other ranks, by age group, per employee/recipient, in euro. Source: The DMD. Note: The oldest age group – 65+ years old – is omitted from the figure.

The three largest expenditures for commuting and housing are the 1) Allowance Daily Travel, 2) Reimbursement for Non-Daily Travel Expenses, and 3) Allowance for housing rent abroad. The last incentive could have been categorized as a deployment-related payment as well. The DMD does not provide any information about the purposes of these incentives. The ministry reports however that it is not satisfied with the first two incentives' ability to achieve their purposes. The DMD is satisfied with the third incentive's purpose achievement. None of the top three incentives have been reformed the past five years.

4.7.5.11 Provision of civilian education

The DMD reports that the NLAF offers a training scheme for civilian employees. Schemes for civilian employees is outside the scope of this report. The DMD provides, however, information about the average annual provision of civilian education for officers and other ranks by age groups. This information is shown in Figure 4.76. The value is modest on average for all age groups. It is interesting that the value is highest for the oldest age groups.

There is one incentive for civilian education in the NLAF: 1) the Training Budget. The system of provision of civilian education is not very complex. The DMD is satisfied with the scheme's ability to achieve its purposes. The scheme has been reformed the past five years.

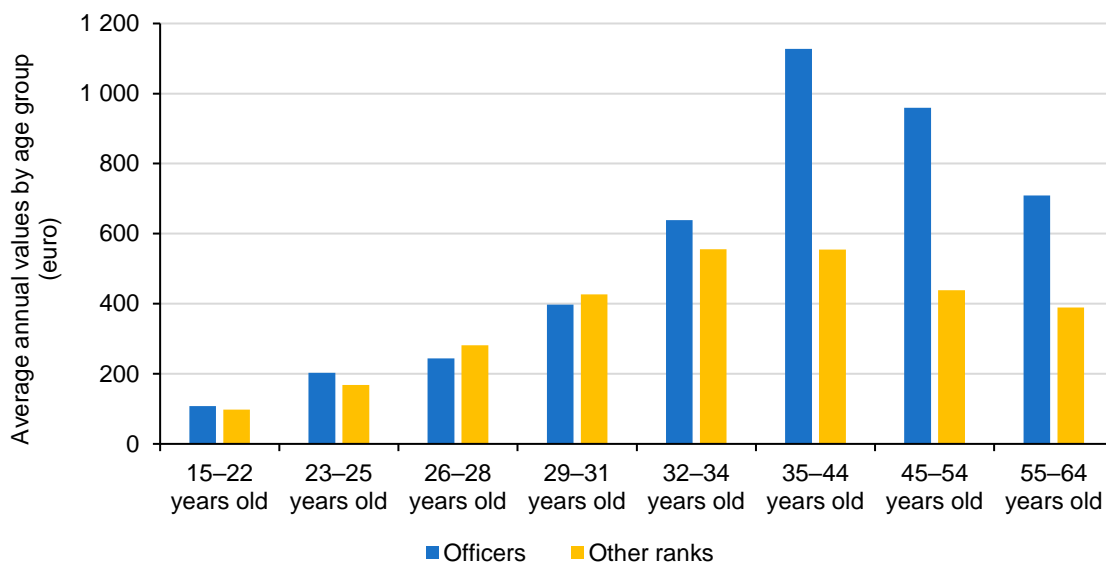


Figure 4.76 Average annual provision of civilian education for officers and other ranks, by age group, per employee/recipient, in euro. Source: The DMD.

4.8 Norway

4.8.1 Executive summary

Norwegian defense expenditures were 6.5 billion euro in 2020, representing 2.0 percent of GDP. This is a relatively high share, ranking fourth among the twelve countries studied. The personnel expenditures accounted for 34.5 percent of the total expenditures, which is a relatively low share, ranking ninth. The military workforce is close to 12,600 personnel, and 29 percent of the military workforce work in the Army. Officers account for 45 percent and other ranks account for 55 percent of the military workforce. Fifty-six percent of the military workforce are less than 35 years old. Norway ranks fifth in this regard among the selection of countries. Norway has a monetary incentive system in which base salary constitutes 68 percent of total personnel expenditures, while irregular supplements make up most of the remaining personnel expenditures. The share of base salary of the personnel expenditures is the median in the selection of countries, ranking fifth among nine countries. The base salary is increasing with age but shows medium steepness compared to the other countries. This holds for both officers and other ranks. Norway has much less emphasis on fixed supplements compared to many of the other studied countries. Norway has by far the most emphasis on irregular supplements among the selection of countries, spending 21 percent of personnel expenditures on this compensation category. Officers in their 20s have 150 percent higher payments of fixed supplements than the reference group, the 45–54 age group. It is similar for other ranks but the variation in fixed supplements by age group is smaller. From the data provided, it seems like Norway has little emphasis on the coverage of commuting and housing expenses as it constitutes around 1 percent of personnel expenditures. This is underestimating the actual expenditures in this compensation category as neither imputed rent from subsidized housing nor expenses incurred by departments are included. Norway suffers

from a similar situation as Australia: the Norwegian Armed Forces needs to sustain high geographical mobility as the base structure is partly distributed in remote and sparsely populated areas. Norway has an extraordinary amount of schemes for fixed and irregular supplements. The overall impression is that Norway finds the monetary incentive system to be not very complex, although it assesses the irregular supplements – which plays a major role in the system – to be complex. Norway is mostly satisfied with how the incentives work, including with the top irregular supplements incentives.

4.8.2 Introduction

Norway is located in northern Europe, and covers the western half of the Scandinavian Peninsula. Norway borders Sweden, Finland, and Russia. Norway covers 385,178 km² and is the 62nd largest country in the world. With a population of 5.4 million inhabitants, Norway ranks as the 118th globally by population. The population density is very low with 14.8 inhabitants per km². This makes Norway the 197th densest populated country in the world. In Norway, 17.5 percent of the population is 65 years and older. This is the 35th highest share in the world.

Norway's GDP was 318.6 billion euro (3,410 billion NOK) in 2020, ranking 32nd in the world. The GDP per capita was 59,225 euro (633,965 NOK), ranking fourth in the world. Norway ranks as the 37th most complex economy. The country is slightly less complex than expected for its income level.⁴⁵ The major industries in Norway are oil and gas, hydropower, aquaculture, and shipping.⁴⁶ The employment rate in Norway is 74.5 percent, which is 8.5 percentage points above the OECD average.

Norway was a founding member of NATO in 1949. With its long coastline and shared border with Russia, a fundamental pillar in Norwegian security policy is to rely on NATO to protect its territorial integrity, sovereignty, and independence.

Norway has contributed to several international operations. Norwegian soldiers participate in military operations all over the world. Some of the operations are Iraq, Kuwait, Qatar, Lithuania, and Mali.⁴⁷

According to the Norwegian Intelligence Service (NIS), Russia poses the main military threat to Norway (NIS 2022). China's willingness to exploit its military and economic power resources and the consequences for US-China rivalry and global power politics, as well as individual states and companies, is also receiving much attention in the report. In addition, terrorism is highlighted as a key security threat for Norway.

The Norwegian Armed Forces (NAF) consist of three branches, ten other departments, and the Norwegian Defence Staff (NDS) and the Norwegian Military Representative to NATO, Brussels. The military branches are the Norwegian Army (*Hæren*), the Royal Norwegian Navy (*Sjøforsvaret*), and the Royal Norwegian Air Force (*Luftforsvaret*). The military departments are

⁴⁵ <https://atlas.cid.harvard.edu/countries/163>

⁴⁶ <https://www.worldatlas.com/articles/which-are-the-biggest-industries-in-norway.html>

⁴⁷ <https://www.forsvaret.no/en/exercises-and-operations/international-operations>

the Norwegian Home Guard (*Heimevernet*), the Norwegian Cyber Defence Force (*Cyberforsvaret*), the Norwegian Armed Forces Joint Medical Services (*Forsvarets Sanitet*), the Norwegian Special Operations Forces (*Forsvarets spesialkommando*), the Norwegian Defence Logistics Organisation (*Forsvarets logistikkorganisasjon*), the Norwegian Defence Joint Operations (*Forsvarets fellestjenester*), the Norwegian Defence University College (*Forsvaret høyskole*), the Norwegian Armed Forces HR and Conscriptioin Centre (*Forsvarets personell- og vernepliktssenter*), the Norwegian Intelligence Service (*Etterretningstjenesten*), and the Norwegian Joint Headquarters (*Forsvarets operative hovedkvarter*). The Norwegian Coast Guard (*Kystvakten*) is a part of the Navy, and is a maritime military force. In addition to NAF, the NMOD is responsible for three defense sector government agencies: the Norwegian Defence Material Agency (*Forsvarsmateriell*), the Norwegian Defence Estates Agency (*Forsvarsbygg*), and the Norwegian Defence Research Establishment (*Forsvarets forskningsinstitutt*, FFI).

4.8.3 The defense budget

The Norwegian defense expenditures were 6.5 billion euro (68.1 billion kroner) in 2020. This makes up 2 percent of GDP. This is the first time Norway reached the NATO 2-percent defense spending target in recent decades. In absolute numbers, Norway’s military spending ranks as the 27th highest globally.

NATO reports the distribution of the defense expenditures on personnel expenditures, equipment, infrastructure and other expenditures. Figure 4.77 shows the distribution. Personnel expenditures constitute the largest share of defense spending, at 34.5 percent. Equipment and other expenditures constitute 28.4 and 30.5 percent, respectively. Infrastructure makes up the smallest part of the budget with 6.5 percent.

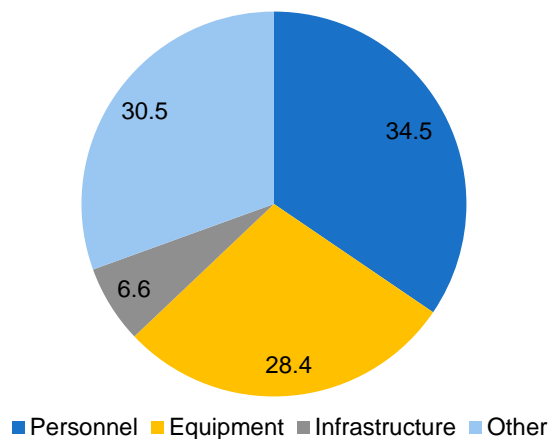


Figure 4.77 Distribution of defense expenditures, in percent. Source: NATO.

Figure 4.78 shows the distribution of personnel expenditures by compensation category. Base salary is by far the largest compensation category. It makes up 68.3 percent of personnel expenditures. The second largest compensation category is irregular supplements, which constitute 19 percent of the personnel expenditures. Pension earnings make up 7.9 percent, and is the third largest category. The remaining categories, fixed supplements, one-time bonuses, the

coverage of commuting and housing expenses, and deployment-related payments, make up a small share each of personnel expenditures. In total, these compensation categories make up 4.9 percent of personnel expenditures.

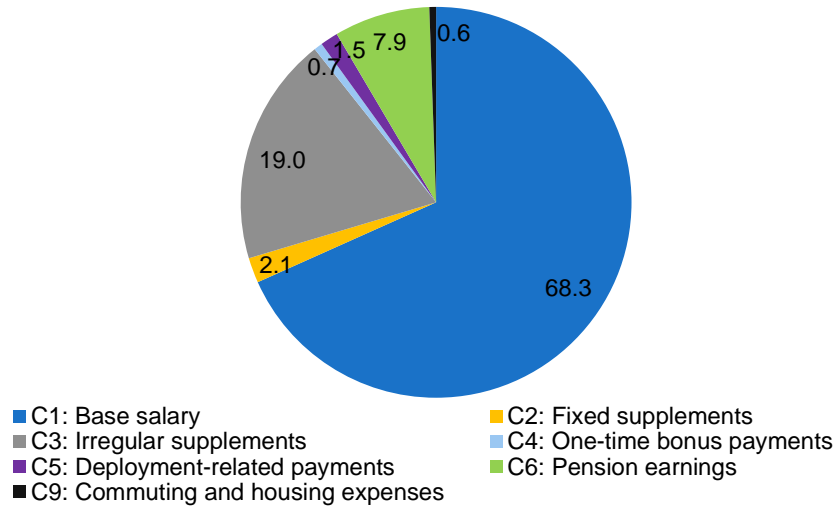


Figure 4.78 Distribution of personnel expenditures, in percent. Source: The NDS.

4.8.4 The personnel situation

There are 18,684 officers, other ranks, and civilians in NAF, as of 2020. The employees are distributed on 5,660 officers, 6,977 other ranks, and 6,047 civilians. Norway has compulsory conscription for both men and women. However, the need for conscripts is much lower than the total amount of people in each cohort. On average, around 9,000 women and men conduct military conscription service every year.⁴⁸ This represents approximately 13 percent of each cohort.⁴⁹

Figure 4.79 shows the number of officers and other ranks by branch. The Army, the Navy, the Air Force, and the Home Guard have 3,636, 2,292, 2,703 and 459 military personnel, respectively. In addition, there are 3,461 military personnel in other defense institutions within NAF.

⁴⁸ <https://www.forsvaret.no/om-forsvaret/forsvaret-i-tall/personell>.

⁴⁹ <https://folkogforsvar.no/verneplikten-i-utvikling/>

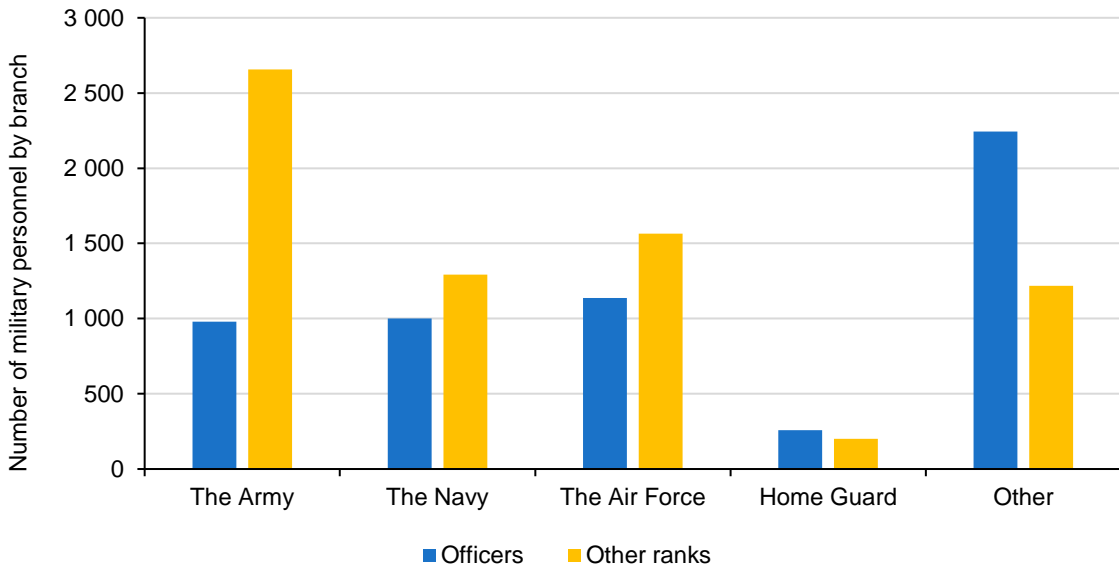


Figure 4.79 Number of officers and other ranks, by branch and defense institutions. Source: The NDS.

Figure 4.80 shows the shares of officers by branches and other defense institutions. The largest share of the officers, 39.9 percent, work in other defense institutions. The Army, the Navy and the Air Force, account for 17.4, 17.8, and 20.6 percent of the officers, respectively. In the Home Guard, 4.6 percent of the officers work.

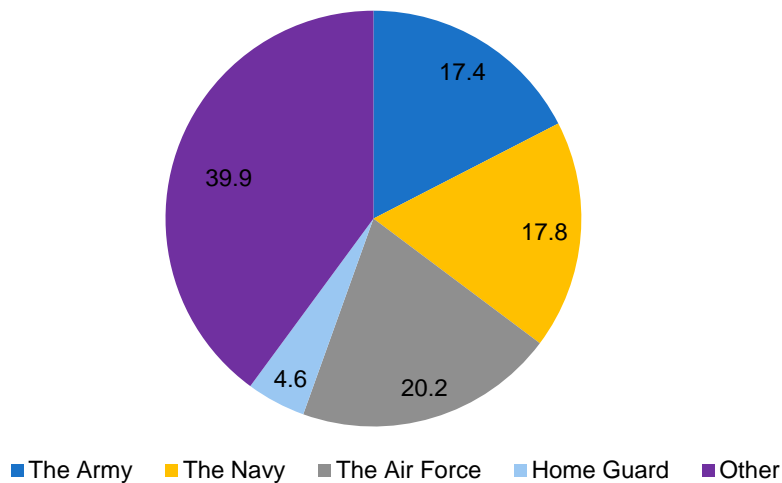


Figure 4.80 Share of officers by branch and defense institutions, in percent. Source: The NDS.

Figure 4.81 shows the shares of other ranks by branches and other institutions. The largest share of the other ranks, 38.3 percent, work in the Army. The Navy and the Air Force, account for 18.6 and 22.6 percent of the other ranks, respectively. The rest of the other ranks work in the Home Guard and other institutions, which account for 2.9 and 17.6 percent of the other ranks, respectively.

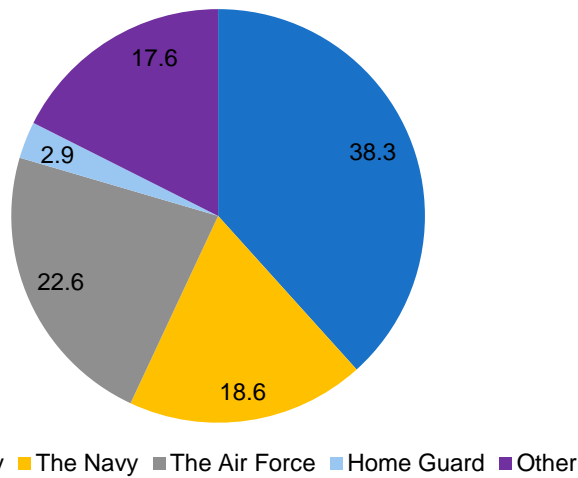


Figure 4.81 Share of other ranks by branch and defense institutions, in percent. Source: The NDS.

Figure 4.82 shows the age distribution among the military and civilian employees. Note that the young age groups contain fewer cohorts than the older age groups. 78.4 percent of the other ranks are under 35 years old. The biggest share of officers, 33.4 percent, are between 45–54 years old. Civilians in NAF are significantly older than the military employees. Only 19.3 percent of the civilians are under 35 years old and 60.9 percent are older than 44 years old.

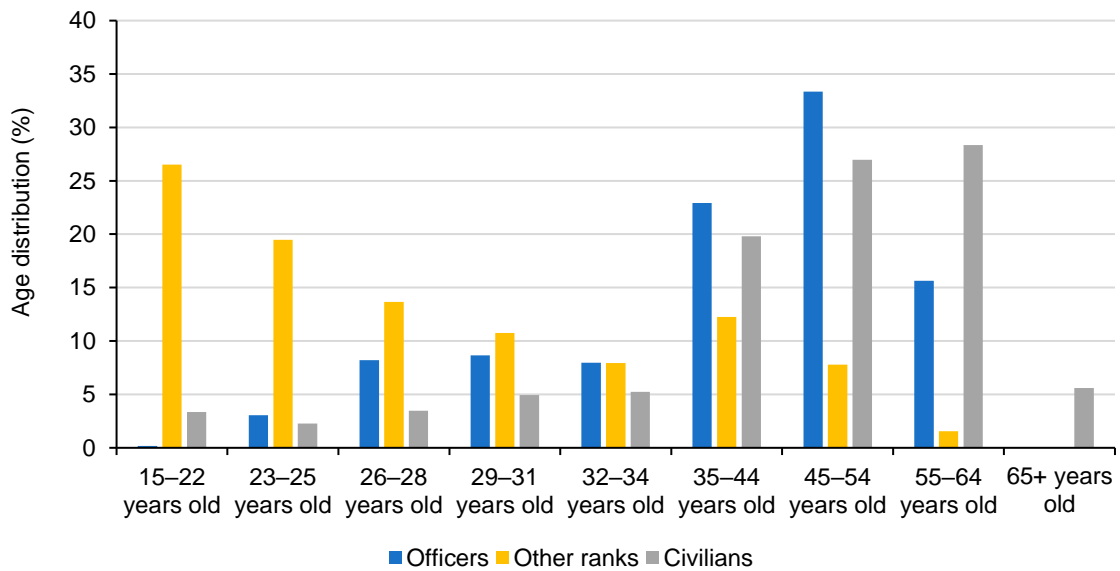


Figure 4.82 The age distribution among officers, other ranks, and civilians, in percent (each employee group sums up to 100 percent). Source: The NDS.

As of 2019, 384 military employees in NAF were deployed abroad.⁵⁰ This is about two percent of the total number of personnel in NAF.

4.8.5 Compensation categories

4.8.5.1 Data description

Norway provides average monthly values per recipient in a full-time position. Only full-time employees who have worked the entire year in 2020 are included in the figures. The NDS has completed the survey on behalf of the NMOD. We also draw on insights from studies on the Norwegian monetary incentive system.⁵¹ Norway provides the number of schemes and an assessment of the complexity of the following compensation categories: fixed supplements, irregular supplements, pension earnings, and the coverage of commuting and housing expenditures. They also provide an assessment of the complexity of the following compensation categories: one-time bonuses and deployment-related payments. Additionally, Norway provides the top three incentives of fixed supplements, irregular supplements, one-time bonuses, the coverage of commuting and housing expenditures, and the top two incentives of pension earnings. Norway provides the satisfaction level and whether the incentives have been reformed for all reported incentives except for one-time bonuses. Norway only provides the satisfaction level and any reform of one of the one-time bonus incentives.

4.8.5.2 Base salary

Base salary makes up 74 percent of personnel expenditures in NAF. In Norway, collective bargaining agreements at the national level and in separate collective agreements mainly determine the wages in the public sector. The public sector follows the wage formation negotiated in the private sector, more specifically the part of the private sector that faces international competition (the export industry) The NMOD negotiates at the government agency level (NAF, the FFI, the NDMA, the NDEA) with the labor unions for a collective wage agreement. In general, therefore, all employees in NAF achieve a raise based on the business cycle in the national economy and the negotiations with the NMOD.

Base salary is tied to rank, seniority, and employment type. Attaining higher grades translates into higher base salary. High-performing individuals climb faster in the rank system.

Figure 4.83 shows the average annual base salary for officers and other ranks by age group. The officers have higher base salary than other ranks in all age groups. The base salary increases with age for both officers and other ranks, and the increase is quite similar. For the youngest age group, 15-22, the average base salary is 38,000 euro (400,000 NOK) for officers and 34,000 euro

⁵⁰ IISS (2020). *The Military Balance 2020*. Routledge.

⁵¹ For more in-depth studies, see for instance (Hanson and Lindgren 2019, 2021, 2022, 2023; Hanson, Lindgren, and Einarsdottir 2023; Lindgren and Hanson 2018, 2019c, 2019a, 2019b; Lindgren and Presterud 2020a, 2020b, 2021b, 2021a).

(360,000 NOK) for other ranks. The average base salary for the oldest age group, 55-64, is 68,000 euro (720,000 NOK) and 59,000 euro (640,000 NOK) for officers and other ranks, respectively.

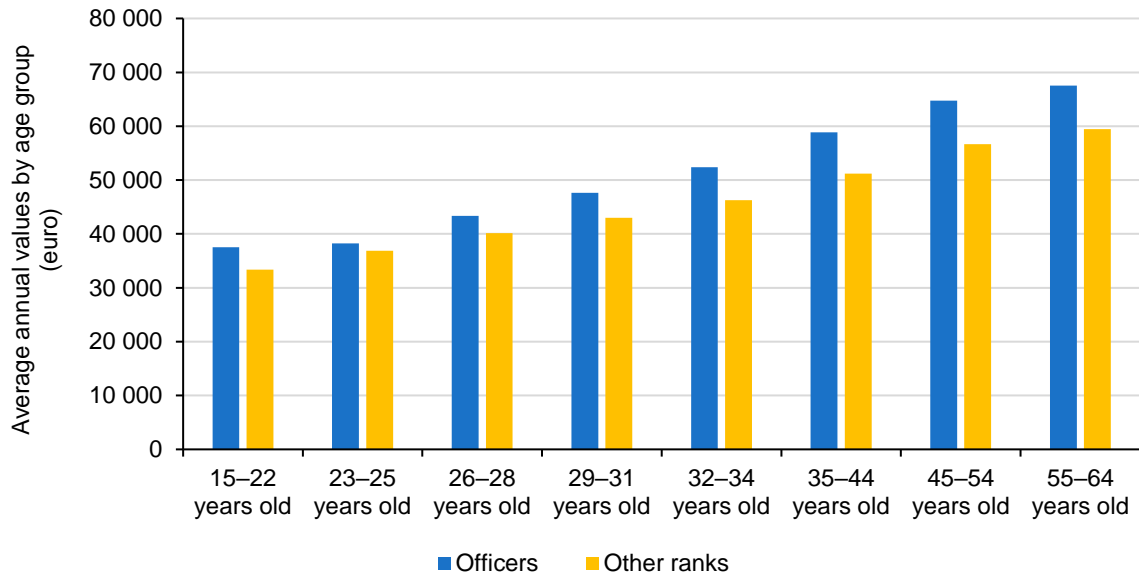


Figure 4.83 Average annual base salary for officers and other ranks by age group, per employee, in euro. Source: The NDS. Note: Only military personnel employed 100 percent during 2020.

4.8.5.3 Fixed supplements

Fixed supplements make up 2 percent of personnel expenditures in NAF. NAF has 180 schemes of fixed supplements. The NDS characterizes the system of fixed supplements as not very complex.

Figure 4.84 shows the average annual fixed supplements per officer and other rank. Officers receive substantially larger amounts of fixed supplements than other ranks in all age groups. Fixed supplements increase gradually with age for other ranks, while it is more variation between age groups among officers. The youngest and oldest officers receive the largest payments of fixed supplements. For the youngest officers, the fixed supplements are salary paid while being students.

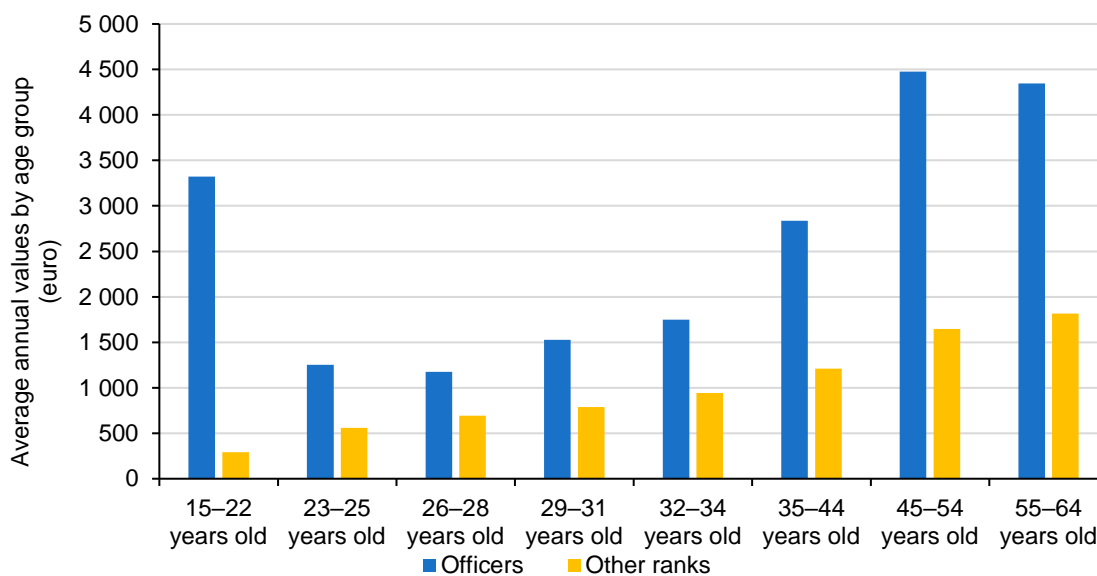


Figure 4.84 Average annual fixed supplements for officers and other ranks, by age group, per recipient, in euro. Source: The NDS. Note: Only military personnel employed 100 percent during 2020.

The NDS reports the top three fixed supplements to be: 1) Flight bonus I–III, 2) Uniform Reimbursement, and 3) Executive Compensation.

The main purpose of the Flight Bonus I–III is higher retention rates among pilots. The pilots sign a 4-year contract that assures retention when receiving this supplement. We do not have information regarding neither the NDS’s satisfaction level of the incentive in achieving its purpose, nor whether it has been reformed the past five years or not.

Uniform Reimbursement is a monthly rate that military employees, who are obliged to use uniforms, receive. The incentive is granted in service at home and abroad, and is intended to cover about 2/3rds of the employees’ average expenses to procure and maintain mandatory uniforms. The purpose of the incentive is to cover de facto expenses, and the NDS characterizes the incentive to have high satisfaction in achieving the purpose. The incentive has not undergone any reforms the past five years. It should be noted that this fixed supplement is not per se a financial incentive, since it is partly covering expenses that the military employees are obliged to pay for in order to perform their work.

Executive Compensation is a special agreement for higher-ranking military personnel in NAF. Higher-ranking military personnel are excepted from the normal laws regulating work hours in Norway. Thus, these employees do not receive overtime payments. Executive Compensation is meant to financially accommodate higher-ranking military personnel’s workload and responsibilities. Executive Compensation is granted, however, to all personnel who are covered by the scheme, regardless of responsibility, workload or other requirements of the position. The arrangement of working hours for the executives shall be such that the executives covered by the scheme are not exposed to undue physical or mental strain, and so that it is possible to safeguard

safety concerns. The purpose of the Executive Compensation is improved recruitment, to induce more effort, and to compensate work amount. The NDS characterizes the incentive as satisfactory in achieving its purpose. The incentive has not undergone any reforms the past five years.

4.8.5.4 Irregular supplements

Irregular supplements make up 19 percent of personnel expenditures in NAF, when pension earnings are included. NAF has 152 schemes of irregular supplements, and the NDS characterizes the system of irregular supplements as complex.

Figure 4.85 shows the average annual irregular supplements for officers and other ranks per employee by age group. For other ranks, the irregular supplements are highest in the middle age groups. Personnel in the 32–34 age group receive, on average, the largest amounts of irregular supplements. The distribution among officers is more skewed towards the younger age groups, with the highest average amount for the 26–28 age group. The youngest and the oldest age groups have the lowest average irregular supplements for both officers and other ranks.

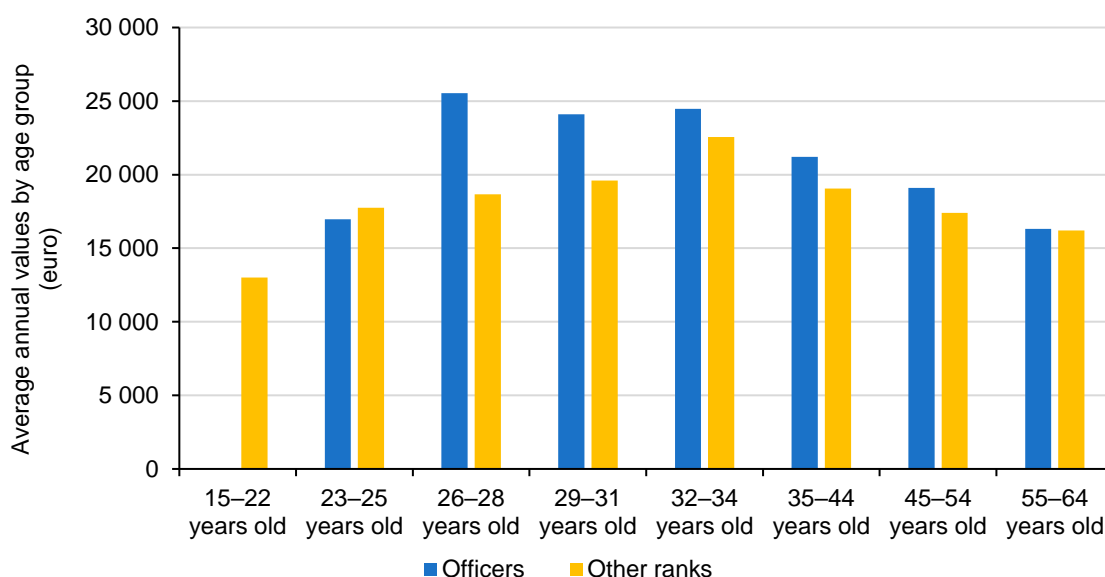


Figure 4.85 Average annual irregular supplements for officers and other ranks, by age group, per recipient, in euro. Source: The NDS. Note: Only military personnel employed 100 percent during 2020.

The NDS reports the top three irregular supplements to be: 1) Exercise Compensation Weekdays 2) Exercise Compensation Weekends, and 3) Guard Service Compensation.

Exercise Compensation Weekdays and Exercise Compensation Weekends are additional payment for participation in exercises. Service outside ordinary working hours is compensated with a 100 percent addition to the base salary per hour. For exercises during weekends, one work hour is paid equivalent to 2 hours and 15 minutes. An additional 30 minutes is added if such service takes place during lunchtime. The value of the financial compensation per day is calculated in

accordance with a rate table. The main purpose of Exercise Compensation Weekdays is to compensate for not adhering to normal labor regulations. The main purpose of Exercise Compensation Weekends is to compensate work outside normal working hours. The NDS characterizes both incentives as satisfactory in achieving their purposes. None of the incentives has undergone reforms the past 5 years.

Guard Service Compensation is similar to the other two top incentives. Guard service outside ordinary working hours is credited with 2 hours. The compensation increases by counting an additional 30 minutes if the service takes place during lunch. The value of the financial compensation per day is calculated in accordance with a rate table. The Guard Service can also be compensated with leisure instead of financial compensation. Hourly on-call Guard Service is compensated as an hour-by-hour watch based on a fraction of the daily rate. The main purpose is the same as for the Exercise Compensation Weekdays: to compensate for not adhering to normal labor regulations. The NDS characterizes the incentive as satisfactory in achieving its purpose, and it has not undergone any reforms the past 5 years.

4.8.5.5 One-time bonus payments

One-time bonus payments make up 0.7 percent of all personnel expenditures in NAF. We do not have information about the number of schemes of one-time bonus payments. The NDS characterizes the system of one-time bonuses as not very complex.

Figure 4.86 shows the average annual one-time bonus payments for officers and other ranks per recipient by age group. Among officers, only employees in the 32–44 age groups receive one-time bonuses. The annual average one-time bonus for employees in the mentioned group is 19,000 euro (204,000 NOK) and 13,000 euro (139,000 NOK), respectively. The average annual one-time bonuses among other ranks is highly concentrated among personnel in the 29–34 age groups. Recipient officers and other ranks in the 32–34 age group receive the highest average amount.

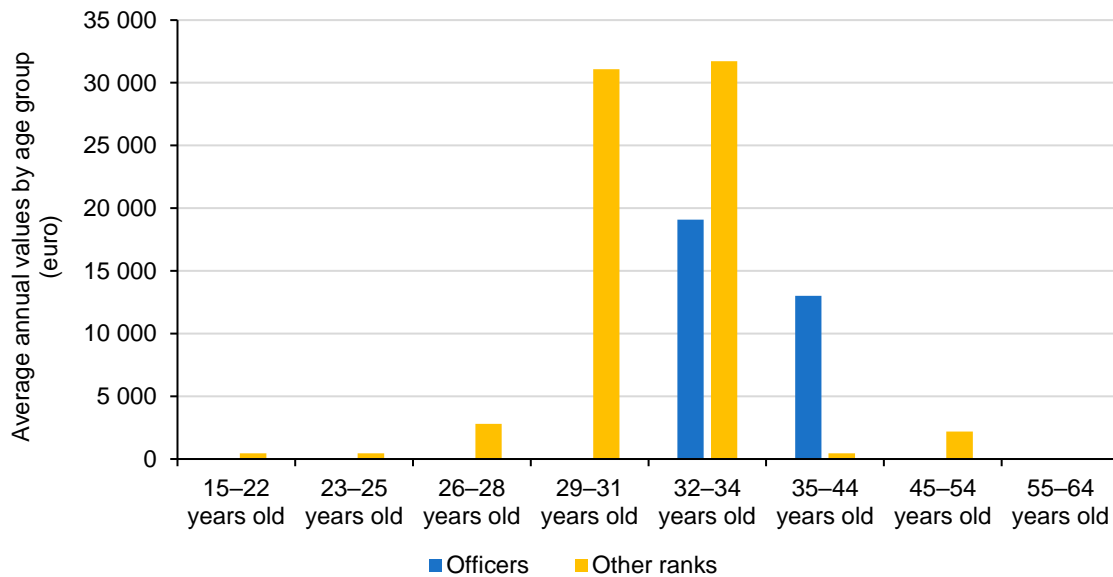


Figure 4.86 Average annual one-time bonus payments for officers and other ranks, by age group, per recipient, in euro. Source: The NDS.

NDS reports the top three one-time bonus payments to be: 1) Bonus Enlisted, 2) Bonus Non-Commissioned Officers, and 3) Bonus International Operations.

Bonus Enlisted and Bonus Non-Commissioned Officers intends to compensate personnel for the end of the contract with NAF when they turn 35 years old. Additionally, the one time-bonuses intend to encourage personnel to endure the tenure and facilitate the transition to a civilian career. All service in NAF beyond 365 days of compulsory conscription service is credited as earning time for bonus.

Bonus International Operations is a one-time bonus payment to civilian personnel on standby. This type of contract is typically for medical professionals or strategic air evacuation. The contracts are only awarded personnel who do not already have a service relationship with NAF. We do not have information about the satisfaction level of the top three incentives, nor whether they have been reformed the past five years, except Bonus Non-Commissioned Officers. The NDS expresses low satisfaction with how this incentive works, and it has been reformed the past five years.

4.8.5.6 Deployment-related payments

Deployment-related payments make up 1.5 percent of the total personnel expenditures in NAF. We do not have information of the number of schemes of deployment-related payments. The NDS characterizes the system of deployment-related payments as not very complex.

Figure 4.87 shows the average deployment-related payments per recipient by age group. Officers have the highest deployment-related payments in the 29–54 age groups. Among other ranks, the payments are highest in the younger age groups, 15–31.

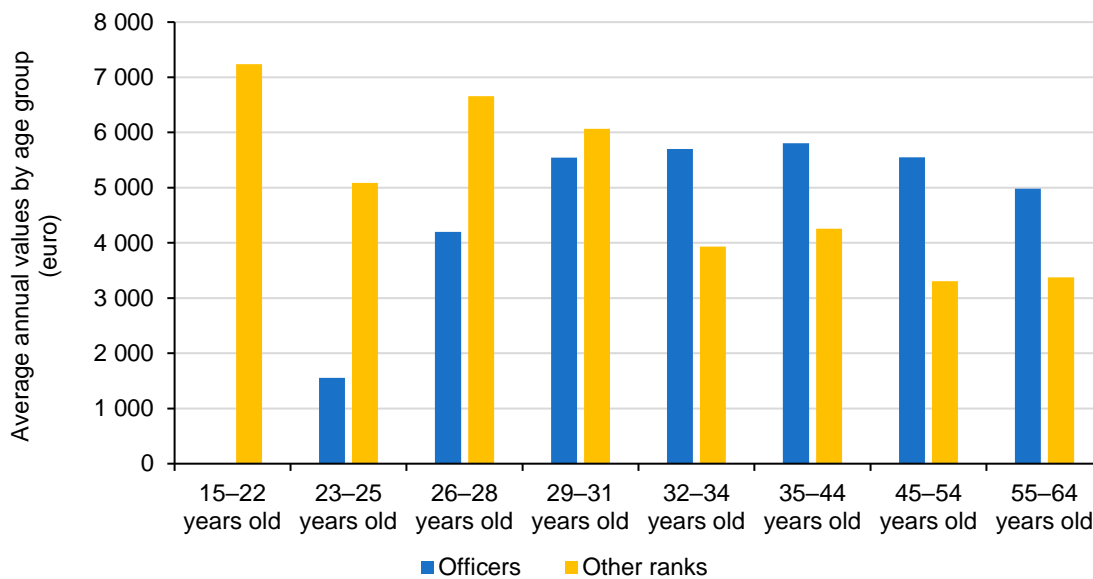


Figure 4.87 Average annual deployment-related payments for officers and other ranks, by age group, per recipient, in euro. Source: The NDS.

The NDS reports the top three incentives to be: 1) Mission Supplement, 2) Deployment Compensation, and 3) Compensation Property Tax (Low Rate).

The Mission Supplement is a financial compensation for risk, inconvenience, high workload, preparation, deprivation, and functioning in side- and senior positions in international operations. Military personnel receive the supplement during the service period. The threat level to life and health determines the size of the Mission Supplement. Personnel serving in areas with high threat to life and health receive the maximum, 100 percent of the full supplement. The Mission Supplement in areas with low threat to life and health receive 67 percent of the full supplement. The main purposes of the Mission Supplement are to improve recruitment, incentivize deployment abroad, and compensate for high level of risk. The NDS characterizes the incentive as satisfactory in achieving its purpose. The incentive has not undergone any reforms the past five years.

Deployment Compensation covers relevant additional expenses associated with serving abroad. The rates and regulations of this incentive follow from the “Special Agreement on Additions, Benefits and Remuneration in the Foreign Service”. The main purposes of the incentive are to incentivize deployment abroad and compensate the personnel for the lack of income of a two-person household. The NDS characterizes the incentive as satisfactory in achieving its purpose. The incentive has not undergone any reforms the past five years.

Compensation Property Tax (Low Rate) aims to shield the military personnel for the income tax they are obliged to pay for the in-kind benefit of being provided housing by the employer while deployed abroad. Since the imputed value of the in-kind benefit is added to the taxable income in accordance with Norwegian tax laws, NAF compensates its personnel. There are two steps in this

allowance; one for personnel provided 1–2 room housing and one for those provided housing with three or more rooms. The Low Rate refers to that personnel deployed abroad do not pay municipality taxes and thus the income tax rate is relatively low. The NDS characterizes the incentive as satisfactory in achieving its purpose. The incentive has not undergone any reforms the past five years.

4.8.5.7 Pension earnings

Pension earnings make up 7.9 percent of personnel expenditures in NAF. In Norway, all citizens earn a public pension from taxable income in the National Insurance Scheme. Employees in the public sector also earn an additional occupational pension, which in the case of state employees (in contrast to public employees in the municipal and county level) in the Norwegian Public Service Pension Fund. In general, therefore, military employees in NAF thus share the pension system with other public employees.

Military employees have a special retirement age at 60 years old for officers as well as other ranks on T60 contracts. T60 contracts end when the employees turn 60 years old. Military employees on T60 contracts have the opportunity to retire from 57 years old if the sum of the age and the years served is 85 or more. In contrast, the ordinary statutory retirement age is 72 and 70 for private sector and public sector employees, respectively. The special retirement age is based on NAF's need for a relatively young age structure to ensure operational capabilities.

In order to compensate for the relatively low retirement age, military employees receive a special retirement age pension from retirement (57–60 years old) to the ordinary Norwegian pension age (67 years). The special retirement pension is set at 66 percent of the pensionable income at retirement. The pensionable income includes base salary and several supplements, but neither most of the activity-based supplements nor overtime. Several other occupations in Norway have special retirement age as well, including nurses and the police forces. Still, we consider the special retirement age pension as a special incentive in place for military personnel.

In order to estimate a value of pension earnings, we could have calculated the value of what is added to the accruals of the special retirement pension, annually. Such a calculation needs to take into account the retention rate, interest rates, etc. Instead, NAF provided its expenditure on pension contributions, on average, for military employees. In Figure 4.89, the value of the pension contributions per age group is shown for officers and other ranks. The value increases with age. The increase is steeper by age groups for officers than other ranks. The different steepness is related to the increase in base salary by age groups.

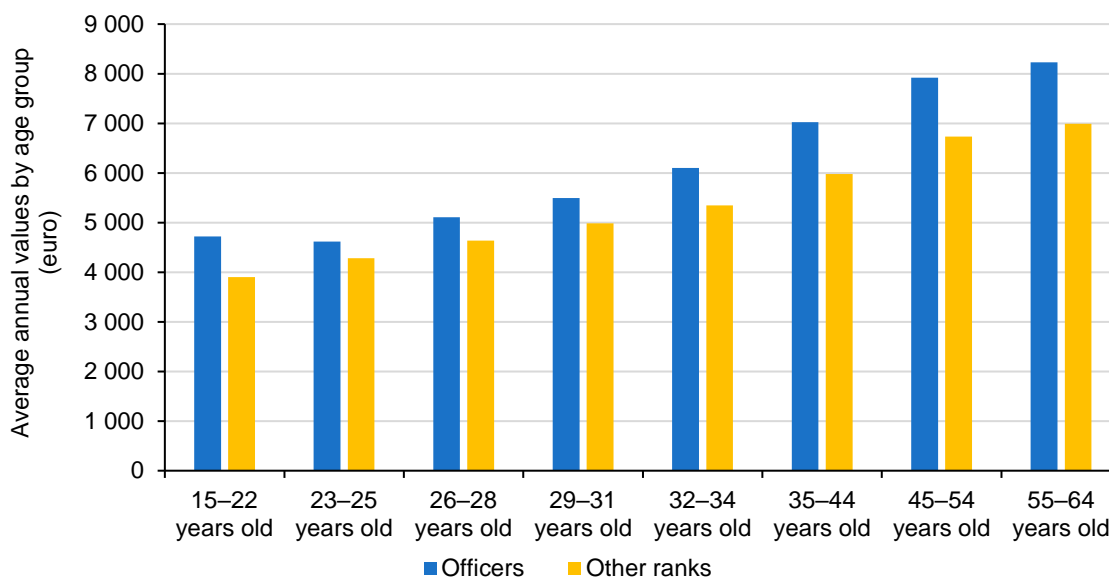


Figure 4.88 Average annual pension earnings for officers and other ranks, by age group, per recipient, in euro. Source: The NDS.

4.8.5.8 Tax exemptions

Special tax exemptions for military personnel are not used in Norway. Sailors are eligible for a special tax exemption, similar to sailors in the civilian sector. Personnel deployed abroad may reduce their income tax rate paid to the Norwegian tax authorities by avoiding municipality tax. This is not different from other public employees that are seconded abroad.

4.8.5.9 Welfare services and payments

Special welfare service and payments for military personnel are not used in Norway.

4.8.5.10 Coverage of commuting and housing expenditures

NAF has 22 schemes for the coverage of commuting and housing expenses. The NDS characterizes the system of commuting and housing expenses as not very complex. The NDS reported all the commuting and housing expenditures that are paid to individual employees. The expenditures omit payments done by the departments within NAF. For instance, commuting expenses may be paid directly by departments. In addition, the commuting and housing expenditures omit hidden subsidies of housing. Optimally, we should have accessed information about the difference between market price of housing and the actual payments by military employees. This way, we could have estimated the imputed rent as an incentive for military employment in NAF.

Figure 4.89 shows the annual average of commuting and housing expenditures for officers and other ranks by age group and per recipient. The value is relatively similar across age groups. Compared to officers, other ranks in all age groups receive less commuting and housing payments.

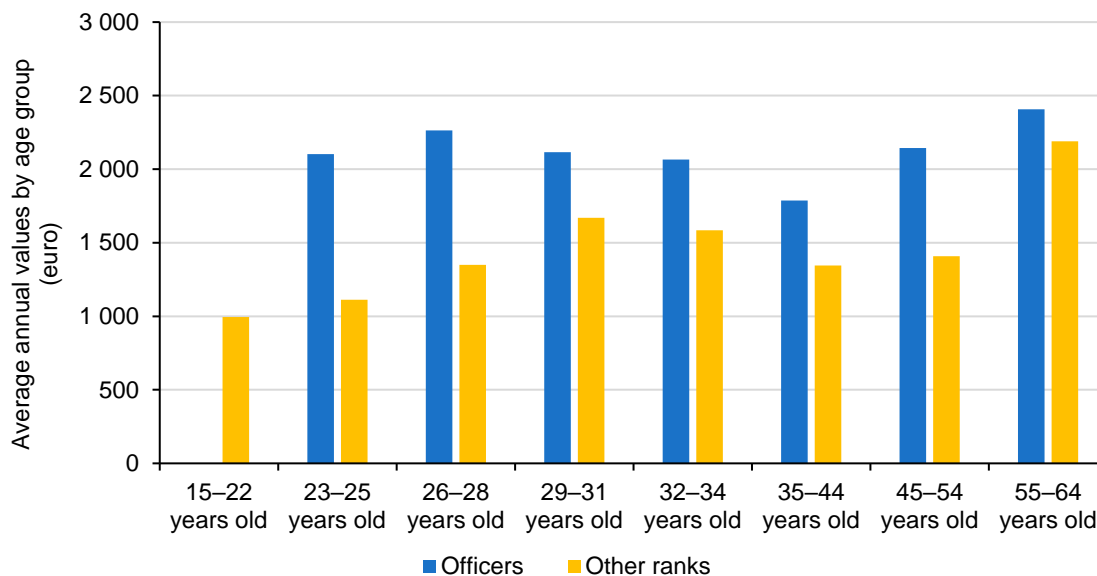


Figure 4.89 Average annual coverage of commuting and housing expenditures for officers and other ranks, by age group, per recipient, in euro. Source: The NDS.

The NDS reports the top three incentives to be: 1) Housing Rental Cost Compensation for Commuters, 2) Relocation Bonus, and 3) Compensation Property Tax (High Rate).

In Norway, NAF demands high geographical mobility among many of its military personnel with a decentralized base structure concentrated in remote areas (Hanson and Lindgren 2022). Until the age of 38 or until they reach a certain rank, military personnel are on a disposition scheme, in which the employer decides the geographical location of the workplace. The disposition scheme often entails frequent relocations throughout the first half of the military career. The military personnel are compensated for the employer's geographical demands by special compensation for the extra expenditures and personal costs incurred by the change of work location.

The Housing Rental Cost Compensation for Commuters are paid to commuters. Personnel ordered to a new service district for the duration of the employment relationship, and who do not relocate, are compensated for transportation expenses between the new service location and their homes. Dietary and night supplements are not covered. In this context, home is considered to be the place of residence elsewhere in Norway, outside the service district, where the personnel permanently reside at the date of appointment.

The Relocation Bonus is paid to personnel, who have been given orders for one year or more to a new service district, and who change their home, when moving to the new service location.

Both the Housing Rental Cost Compensation for Commuters and the Relocation Bonus are taxable compensation schemes paid to commuters and movers, respectively. The schemes are based on NAF's dispositions, and are intended to provide partial compensation for the necessary maintenance of contact with family and networks at the former work location.

Compensation Property Tax (High Rate) aims to shield the military personnel for the income tax they are obliged to pay for the in-kind benefit of being provided housing by the employer when they are instructed to work at a workplace far from their current home. The imputed value of the in-kind benefit is added to the taxable income in accordance with Norwegian tax laws. There are two steps in this allowance; one for personnel provided 1–2 room housing and one for those provided housing with three or more rooms. The High Rate refers to that personnel pay all taxes, in contrast to personnel deployed abroad (see Section 4.8.5.6), and thus the income tax rate is relatively high.

4.8.5.11 Provision of civilian education

NAF has an internal military education institution, the Norwegian Defence University College, which provides primarily military oriented education.

Many artisan, trades, and technical educations, e.g. aviation mechanic, industrial machinery mechanic, computer engineer, are also attractive in the civilian sector. The education provided to many military personnel is also of value in the civilian labor market, and has, therefore, attractive value for recruitment and retention purposes.

In addition, NAF offers other ranks on T35 contracts, which ends when the employees turn 35 years old, to receive the one-time bonus in the form of two years as full-time student at a civilian education institution, while receiving a full base salary during the student period. We have neither received any further information regarding top three incentives nor the value of the provision of civilian education.

4.9 Poland

4.9.1 Executive summary

Polish defense expenditures amounted to 11.7 billion euro in 2020, representing 2.23 percent of GDP. This is a relatively high share, ranking second among the twelve countries studied in this report. Personnel expenditures accounted for 44.7 percent of the total expenditures, which is close to the median among the studied countries, ranking fifth. The military workforce is close to 60,000 personnel, and 24 percent of the military workforce work in the Army, while 50 percent work in institutions other than the Army, the Air Force, the Navy, and the Home Guard. Officers account for 35 percent of the military workforce, and the other ranks account for 65 percent of the military workforce. The demographics of the military workforce skew old – only 22 percent are fewer than 35 years old. This ranks eleventh among the selected countries. Poland has a monetary incentive system in which base salary constitutes 76 percent of total personnel expenditures, while fixed supplements and one-time bonus payments make up most of the remaining personnel expenditures. The share of base salary in personnel expenditures is close to the median, and Poland ranks third among nine countries. Poland places the fourth highest emphasis on fixed supplements, with the share of personnel expenditures spent on this compensation category being 13 percent. After Japan, Poland has the strongest emphasis on one-time bonus payments in the

monetary incentive system out of the nine countries that provided sufficient data. Poland spends 11 percent of personnel expenditures on this compensation category. Poland considers its schemes for fixed supplements to be very complex, while the other compensation categories in use are assessed as simple. Poland is satisfied or highly satisfied with its incentives.

4.9.2 Introduction

Poland is in Central Europe and shares borders with Lithuania and Russia in the Northeast, Belarus and Ukraine in the East, Slovakia and the Czech Republic in the South, and Germany in the West. It also shares maritime boundaries with Sweden and Denmark. Poland covers 312,710 km² and is the 70th largest country in the world. Poland is the fifth most populous country in the EU, with a population of nearly 38 million. It ranks as 39th globally by population. The population density is 124 per km². In Poland, 18.7 percent of the population is aged 65 and above. This is the 28th highest such percentage in the world.

Poland's GDP was 524 billion euro (2,327 billion zloty) in 2020, ranking 21st in the world. The GDP per capita was 13,825 euro (61,391 zloty), ranking 62nd in the world. Poland ranks as the 26th most complex economy in the world by the Atlas of Economic Complexity. The country is slightly more complex than expected for its income level.⁵² The largest industries in Poland are the agriculture, manufacturing, tourism, and energy industries.⁵³ The employment rate in Poland is 67.8 percent, 1.8 percentage points higher than the OECD average.⁵⁴

Poland became a member of NATO in 1999. According to the Ministry of National Defence of Poland (PMOD) the most important benefits of Poland's NATO membership are the following: an increase in the security and prestige of Poland, a transformation of the Polish Armed Forces, and infrastructural investment. Among other things, Poland has contributed to NATO in the form of participation in NATO operations and missions.⁵⁵ As of 2020, Poland had 755 military personnel deployed abroad. This equates to 0.07 percent of its military personnel.

In the Concept of Defence of the Republic of Poland, the PMOD emphasizes the following threats to Poland's security: Russia's aim of enhancing its position in the global balance and terrorism.⁵⁶ However, the Defence Concept was published in 2017, years before Russia's war in Ukraine.

The Polish Armed Forces (PAF) (*Siły Zbrojne Rzeczypospolitej Polskiej*), consist of the Land Force (*Wojska Lądowe*), the Navy (*Marynarka Wojenna*), the Air Force (*Siły Powietrzne*), the Special Forces (*Wojska Specjalne*), and the Territorial Defense Force (*Wojska Obrony Terytorialnej*). They are under the command of the Ministry of National Defense of Poland. In Poland, the law enforcement coast guard role is performed by the Maritime Branch of the Polish

⁵² <https://atlas.cid.harvard.edu/countries/177>

⁵³ <https://www.worldatlas.com/articles/the-biggest-industries-in-poland.html>

⁵⁴ <https://data.oecd.org/emp/employment-rate.htm>

⁵⁵ <https://www.gov.pl/web/national-defence/poland-in-nato-20-years>

⁵⁶ <https://www.gov.pl/web/national-defence/security-environment-of-poland-today-and-in-15-years>

Border Guard. The Polish Border Guard is operating under the Polish Ministry of the Interior and Administration.

4.9.3 Defense expenditures

Polish defense expenditures amounted to 52,110 million zloty in 2020, which equates to 11,735 million euro. This represents 2.23 percent of GDP in Poland. The share of GDP spent on national defense was around 2 percent during the 2014–2020 period, with an estimated share of 2.42 percent in 2022. In absolute numbers, Poland ranks 22nd globally in military expenditures.

NATO reports the distribution of the defense expenditures on various components. In Figure 4.90 the distribution is shown. Personnel expenditures are the largest component of Polish defense expenditures, at 44.7 percent. The figure also shows that equipment, infrastructure, and other components make up 29.3, 4.3, and 21.7 percent of expenditures, respectively.

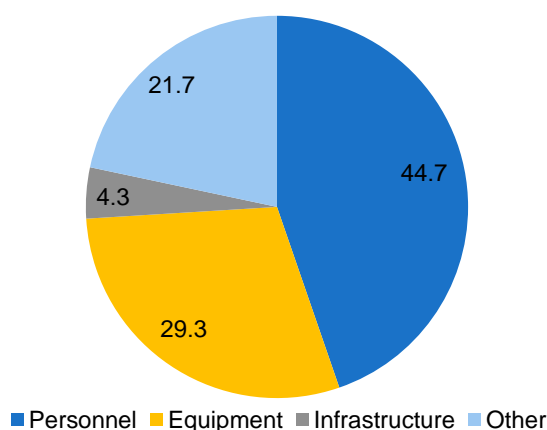


Figure 4.90 Distribution of defense expenditures, in percent. Source: The PMOD.

The PMOD has reported the distribution of personnel expenditures on the various compensation categories. Figure 4.91 shows the distribution of monetary personnel expenses by compensation category. Base salary is, by far, the largest component of personnel expenditures, at 75.8 percent. The remaining 24.2 percent is distributed between fixed supplements, irregular supplements, and one-time bonus payments. Fixed supplements account for 13.0 percent of personnel expenditures, and one-time bonus payments account for 11.1 percent of the personnel expenditures. Irregular supplements only account for 0.1 percent of total personnel expenditures.

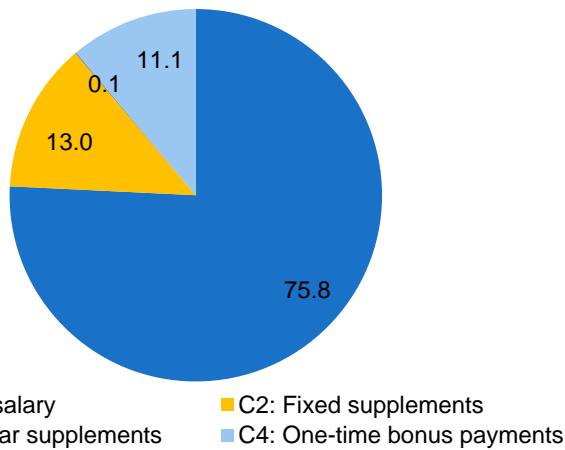


Figure 4.91 Distribution of compensation categories in Polish expenditures on personnel, in percent. Source: The PMOD.

4.9.4 The personnel situation

There were 20,614 officers, 38,893 other ranks, and 48,197 civilians in the PAF in 2020. Poland does not have a conscription system.

Figure 4.92 shows the number of military personnel by branch and rank. The Army, the Navy, and the Air Force have 14,509; 3,370; and 9,385 military personnel, respectively. In addition, there are 2,547 military personnel in the Home Guard and 29,696 military personnel in other institutions within the PAF.

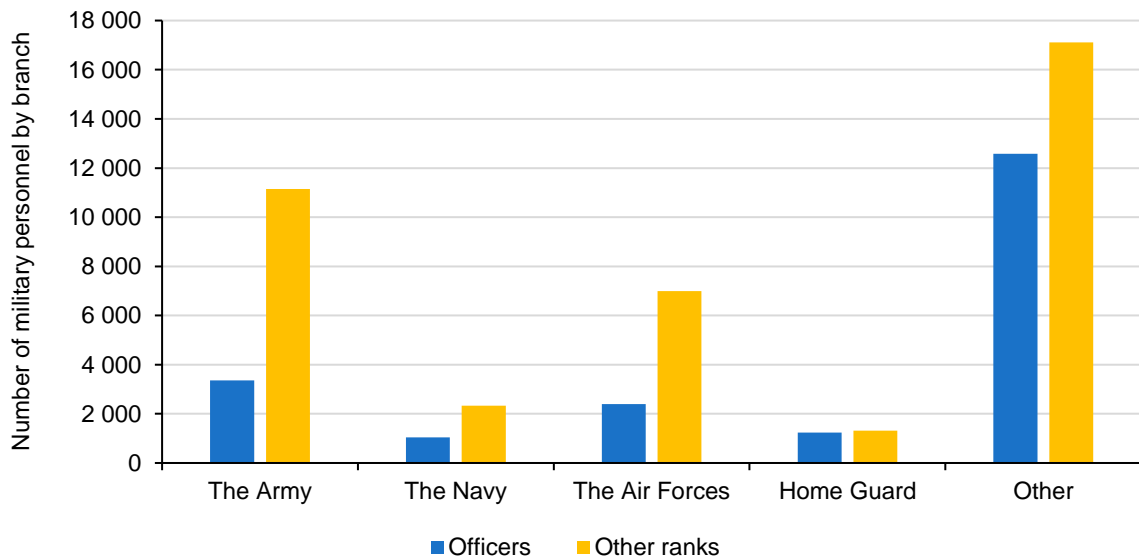


Figure 4.92 Number of military personnel, by branch and defense institutions, officers and other ranks. Source: The PMOD.

In Figure 4.93, the shares of officers for the three branches, the Home Guard, and other institutions are shown. The Army, the Navy, and the Air Force account for 16.3, 5.0, and 11.6 percent of the officers, respectively. The Home Guard employs 6.0 percent of officers. The large majority of the officers works in other institutions.

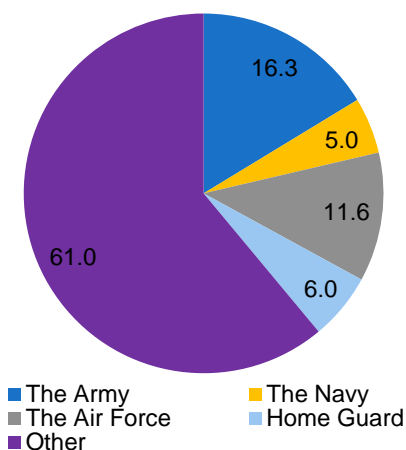


Figure 4.93 Share of officers by branch and defense institution, in percent. Source: The PMOD.

In Figure 4.94 the shares of other ranks for the three branches, the Home Guard, and other institutions are shown. The Army, the Navy, and the Air Force account for 28.7, 6.0, and 18.0 percent of the other ranks, respectively. The Home Guard employs 3.4 percent of the other ranks. A large share of the other ranks work in other institutions – forty-four percent.

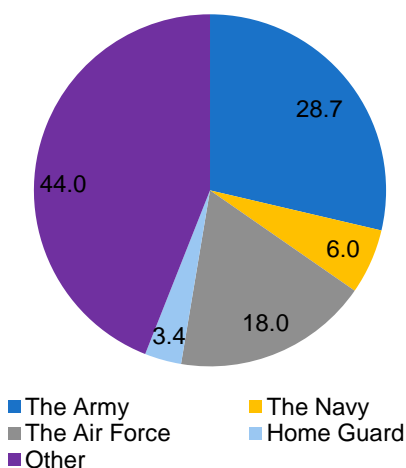


Figure 4.94 Share of other ranks by branch and defense institution, in percent. Source: The PMOD.

Figure 4.95 shows the overall age distribution of officers, other ranks, and civilians. Of the officers, 26.1 percent are under 35 years old, and 37.4 percent are above 44 years old. Of other

ranks are 20.1 percent under 35 years old, and 23.6 percent are above 44 years old. Of the civilians, 72.2 are under 35 years old, and 1.7 percent are above 44 years old.

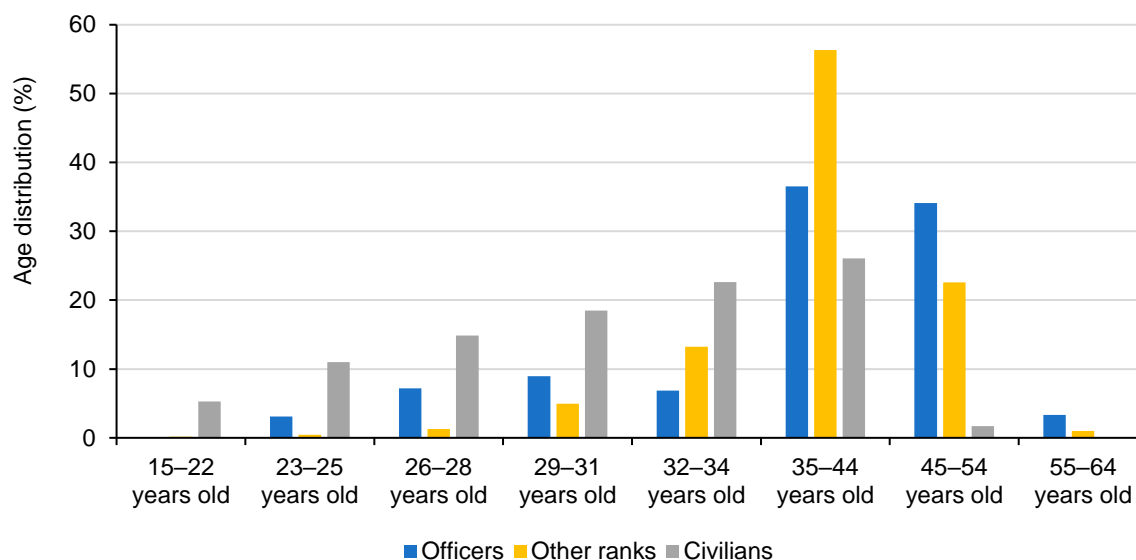


Figure 4.95 The age distribution among the officers, other ranks, and civilians, in percent (each employee group sums up to 100 percent). Source: The PMOD.

Poland has 755 military personnel deployed abroad. This equates to 0.07 percent of its military personnel. This includes professional soldiers, soldiers of the territorial military service, and the National Reserve Forces. These military personnel are deployed in peacetime establishments.

4.9.5 Compensation categories

4.9.5.1 Data description

Poland provides average monthly values for officers, other ranks, and privates. They do not divide these numbers into age categories. The compensation categories the PMOD provides numbers for are base salary, fixed supplements, irregular supplements, and one-time bonus. For the supplements and one-time bonuses, only recipients are taken into account when calculating the averages. Poland provides an assessment of the complexity of the following compensation categories: fixed supplements, irregular supplements, and one-time bonus. Poland does not provide the number of schemes for any compensation category. They do however provide the top three incentives, satisfaction level of the incentives, and whether they have been reformed the past five years for fixed supplements, irregular supplements, and one-time bonuses.

4.9.5.2 Base salary

Base salary makes up 75.8 percent of Polish personnel expenditures. Professional soldiers receive a base salary and other monetary incentives specified by law. The base salary adequately compensates the military personnel for the hardships, limitations, and sacrifices associated with professional military service. The average monthly base salary for officers is 1,363 euro (6,056

zloty), 1,009 euro (4,481 zloty) for other ranks, and 831 euro (3,692 zloty) for privates. This is shown in Figure 4.96.

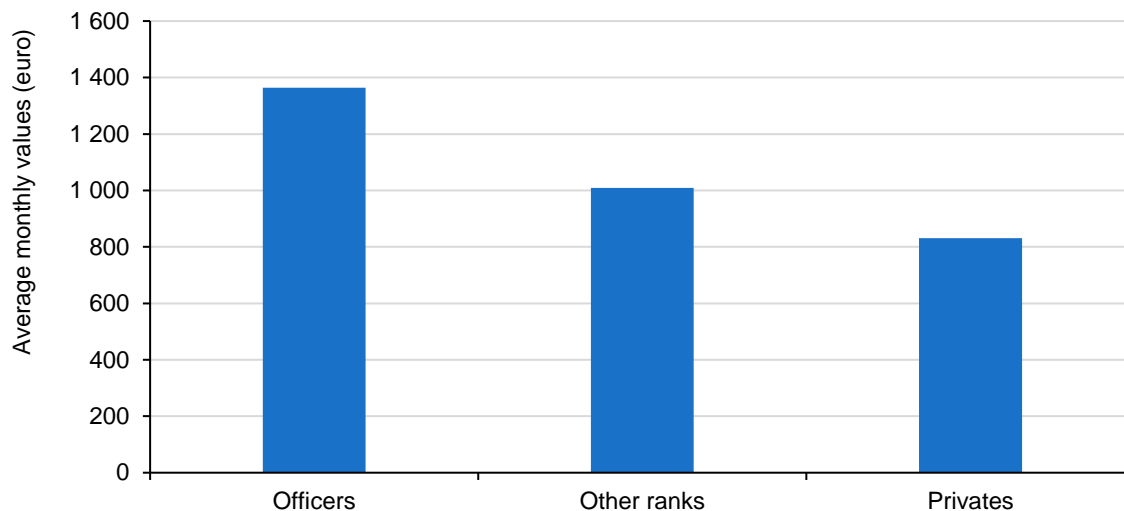


Figure 4.96 Average monthly base salary for officers, other ranks, and privates, per employee, in euro. Source: The PMOD.

4.9.5.3 Fixed supplements

Fixed supplements account for 13 percent of personnel expenditures. Professional soldiers receive the following allowances as fixed supplements: 1) the Special Allowance, 2) Service Allowance, 3) Allowance for Long-Term Military Service, 4) Incentive Allowance, 5) Function-Related Allowance, and 6) Compensation Allowance. The PMOD assesses the system of fixed supplements as not very complex.

The Special Allowance is paid for special qualities or conditions in terms of performing professional military service, for example, for pilots, aircraft attendants, sailors, parachute jumpers, anti-terrorism soldiers, divers, those serving under harmful conditions, and soldiers participating in rescue operations.

The Service Allowance is paid to personnel for performing professional military service in specific command and managerial positions or independent positions, for example, commanders of battalions and companies, commanders of non-commissioned officer schools, doctors, air traffic controllers, and guidance navigators.

The Incentive Allowance is paid to professional soldiers serving in the corps of professional non-commissioned officers and professional privates for obtaining a good grade in their official opinion and having a specified qualification class in the specialty consistent with the occupied official position.

The Function-Related Allowance is paid to personnel for the performance of duties assigned to the single-person authority of a military higher education institution or its deputy.

Compensation allowance is a supplement to the base salary. It may be fixed in monthly or daily rates or for the performance of specific activities. Allowances set as monthly rates are permanent.

On average, officers, other ranks, and privates receive 256 euro (1,137 zloty), 128 euro (569 zloty), and 57 euro (255 zloty), respectively, in fixed supplements per month. This is shown in Figure 4.97. Only the number of soldiers receiving the fixed supplements was taken into account when calculating the average.

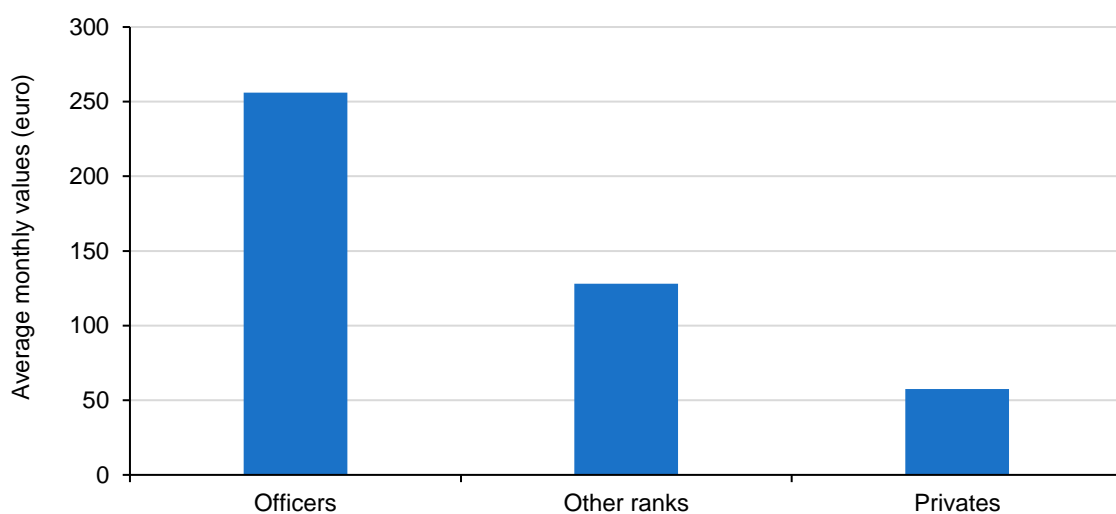


Figure 4.97 Average monthly fixed supplements for officers, other ranks, and privates, per recipient, in euro. Source: The PMOD.

The top three fixed supplements are the 1) Allowance for Long-Term Military Service, 2) Special Allowance, and 3) Work Allowance. Their main purpose is to improve recruitment, ensure higher retention rates, induce more effort, and provide for the satisfactory completion of employees' careers. The PMOD is highly satisfied with these incentives in terms of achieving their purposes. All of them have been reformed the past five years.

4.9.5.4 Irregular supplements

Irregular supplements account only for 0.1 percent of the PAF's total personnel expenditures. The PMOD characterizes the system for irregular supplements as simple.

The average monthly amount of irregular supplements for officers, other ranks, and privates are 118 euro (522 zloty), 64 euro (283 zloty), and 58 euro (258 zloty), respectively. This is shown in Figure 4.98. Only the number of soldiers receiving the irregular supplements was taken into account when calculating the average.

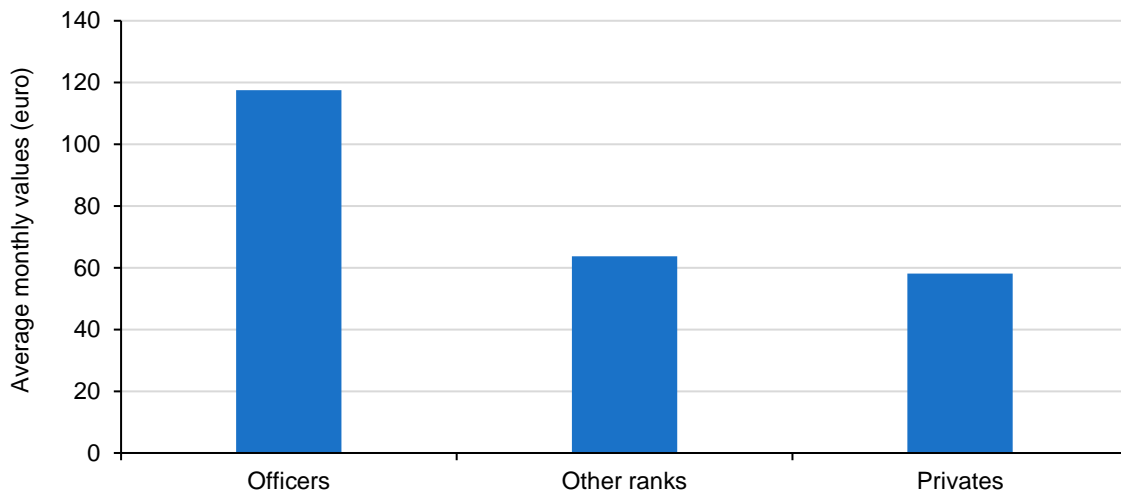


Figure 4.98 Average monthly irregular supplements for officers, other ranks, and privates, per recipient, in euro. Source: The PMOD.

The top three irregular supplements are the 1) Flight Allowance, 2) Bonus for Parachute Jumping, and 3) Allowance for Demining or Clearing the Area of Explosive or Dangerous Objects. The purposes of these top three irregular supplements are to improve recruitment, increase retention rates, and induce more effort. The PMOD is satisfied with all the top three incentives in terms of achieving their purposes. None of the incentives have been reformed in the past five years.

4.9.5.5 One-time bonus payments

The one-time bonus payments constitute 11.1 percent of the PAF's total expenditures on personnel. The PMOD characterizes the one-time bonus system as simple.

In Figure 4.99 the average annual one-time bonus for recipients is shown. The average annual one-time bonus is 7,742 zloty (1,743 euro) for officers; 4,447 zloty (1,001 euro) for other ranks; and 2,441 zloty (550 euro) for privates. Only the soldiers receiving the one-time bonuses were taken into account when calculating the average.

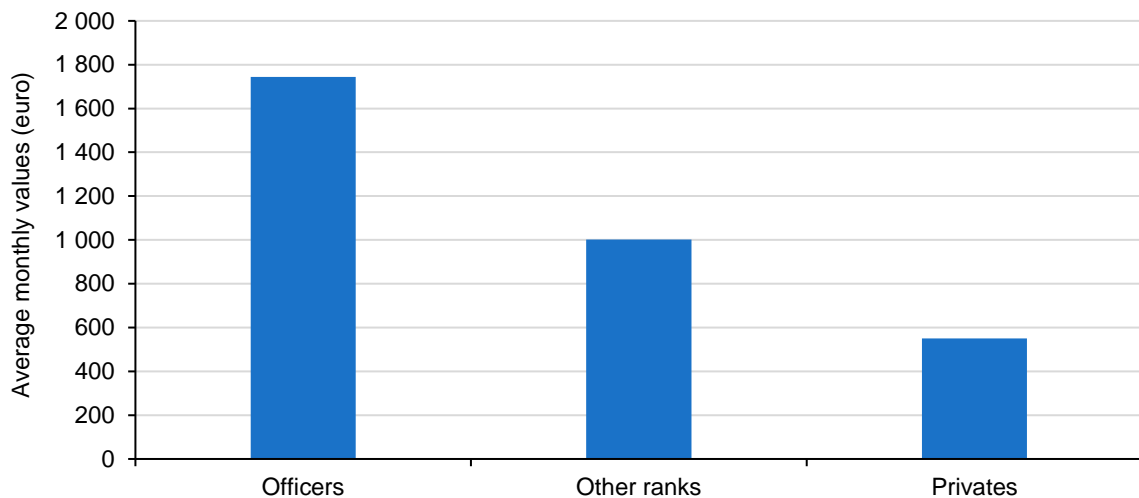


Figure 4.99 Average annual one-time bonus supplements for officers, other ranks, and privates, per receiver, in euro. Source: The PMOD.

The top three incentives are 1) the Discretionary Award, 2) the Jubilee Award, and 3) Additional Annual Salary. The main purposes of the Discretionary Award are to improve recruitment, increase retention rates, and induce more effort. The main purposes of the Jubilee Award and Additional Annual Salary are to improve recruitment, increase retention rates and provide satisfactory completion of employees' career. The PMOD is highly satisfied with the top three incentives in terms of achieving their purposes. None of the incentives have been reformed in the past five years.

4.9.5.6 Deployment-related payments

The most important deployment-related payments are 1) Base Salary with other monetary incentives; 2) the Expatriate Duty, and 3) the War Allowance. The PMOD does not provide any assessment about the purposes of these payments. We do not know how satisfied the PMOD is with these incentives' ability to achieve this purpose or whether the incentives have been reformed in the past five years.

The Expatriate Duty is a payment made to military personnel deployed abroad. The amount is subject to adjustment for cost of living, position, and the function a military employee has when deployed abroad.

The War Allowance is paid to military personnel who serve in war zones.

The PMOD has not reported any expenditures on deployment-related payments. The PMOD does not report the number of schemes or the complexity of the compensation category system.

4.9.5.7 Pension earnings

The Polish military pension system is independent from the public one. A soldier who turns 60 is obliged to leave the position and enter the reserves. A military pension strongly depends on service length and the previous position obtained. The pension is granted for an unlimited period.

There are two pension systems in the Polish Armed Forces, depending on when the military personnel entered the profession of military service.

For those who entered before January 1, 2013, the condition for retirement is having served a minimum of 15 years. The pension is 40 percent of the base for 15 years of military service and increases by 2.6 percent of the base for each additional year of such service, up to a maximum of 75 percent of the base.

For those who entered professional military service after December 31, 2012, the condition for retirement is to have served 25 years. The pension is 60 percent of its base for 25 years of military service and increases by 3 percent for each additional year of such service up to a maximum of 75 percent of the base.

The PMOD has not reported any expenditures on pension earnings. The ministry does not report the complexity of the system for pension earnings. The PMOD does not report on the purposes of the pension earnings incentive, how satisfied the ministry is with the incentive, or whether the scheme has been reformed in the past five years.

4.9.5.8 Tax exemptions

In Poland, there is an exemption from personal income tax for employees up to the age of 26 in order to improve their situation in the labor market. The exemption depends on an individual's annual income. Dues received by soldiers deployed abroad; dues for business trips; and costs incurred to ensure safe working conditions, such as meals and uniforms are exempt from income tax. Additionally, allowances received in connection with soldiers' accommodations (e.g. housing benefits) are also exempt from income tax.

The PMOD does not report total expenditures on tax exemptions or an assessment of the complexity of the system of tax exemptions.

4.9.5.9 Welfare services and payments

There are social benefits for professional soldiers in Poland. Among the main benefits we can include 1) the Separation Allowance, 2) the Organized Leisure Subsidy, 3) Reduced Priced for Public Railway Transport, and 4) Allowances.

The Separation Allowance is compensation for being separated from one's immediate family. It is paid on a monthly basis at the request of the soldier.

The Organized Leisure Subsidy is an allowance for organized leisure for a soldier and their family members. The amount depends on the income per family member.

Reduced Prices for Public Railway Transport are granted upon the request of the soldier.

Allowances can be paid to military personnel in cases of fortuitous events, natural disasters, long-term illness or death of a family member, and other causes of the significant deterioration of material conditions.

The PMOD does not report total expenditures on welfare services and payments or assess the complexity of the system of welfare services and payments.

4.9.5.10 Coverage of commuting and housing expenditures

In the Polish Armed Forces, the top three incentives for the commuting and housing category are the 1) Reimbursement of Daily Commuting Costs, 2) Housing Allowance, and 3) Allocation of Houses. The PMOD does not report the purposes of these incentives, or its level of satisfaction with these incentives' abilities to achieve their purposes. There is no information about whether these incentives have been reformed in the past five years.

The Reimbursement of Daily Commuting Costs is an allowance that offers partial compensation (75 percent) for the costs incurred by soldiers while commuting from their places of residence to their places of duty. The reimbursement is paid upon application on a monthly basis.

The Housing Allowance is a benefit paid because of a lack of eligible housing. The amount depends on the type of garrison the soldier serves in. The benefit is paid upon application on a monthly basis by the Military Property Agency. Soldiers who vacate the dwelling they occupied after dismissal from military service will be paid a housing allowance. The amount depends on the length of service and the location of the dwelling, among other things. Soldiers who have acquired the right to a military pension are entitled to buy the dwelling they occupy with a reduction equal to 95 percent of the market value of the dwelling.

Regarding the Allocation of Housing, the size of housing depends on the number of family members who will live with the soldier.

The PMOD does not report total expenditures for the coverage of commuting or housing expenditures or an assessment of the complexity of the system for the coverage of commuting and housing expenditures.

4.9.5.11 Provision of civilian education

Professional soldiers may receive education if it does not interfere with the performance of their official tasks. The soldier must inform the commander of their military unit in writing about such education and may apply for assistance in connection with these studies. Assistance may only be granted in cases in which the level and direction of study coincide with the qualification requirements of the service position occupied or planned for.

The commander of the military unit, after obtaining the approval of the body authorized to designate a professional soldier to a higher official position than the one occupied, shall form an agreement with the soldier. The agreement shall specify, among other things, the type of assistance, in particular the coverage of tuition and reimbursement of travel expenses within the country. Additionally, the agreement shall include the conditions for the reimbursement of the assistance in the event of the discontinuation of the study or the soldier's dismissal from the professional military within the period specified in the agreement, not exceeding three years from the end of study.

A professional soldier may also be directed to study or learn at a military or non-military school or via an internship, course, or specialization at home or abroad. If the cost exceeds six times the lowest base salary of a soldier, a contract that specifies the terms and conditions for reimbursement of the costs in the event of discontinuance, withdrawal, or dismissal before the period of military service specified in the contract is over.

4.10 Spain

4.10.1 Executive summary

Spanish defense expenditures were 11.2 billion euro in 2020, representing 1.0 percent of GDP. This is a very low share, ranking twelfth among the twelve countries studied in this report. Personnel expenditures accounted for 62.5 percent of total expenditures, which is a very high share among the studied countries, ranking second. The military workforce is close to 60,000 personnel, and 54 percent of the military workforce work in the Army. Officers account for 50 percent of the military workforce, and other ranks account for 50 percent of the military workforce. The demographics of the military workforce skew very old – only 17 percent are less than 35 years old. This is the lowest share of the selected countries. Spain has a monetary incentive system with a very strong emphasis on base salary, fixed supplements, pension earnings, and tax exemptions and a moderate emphasis on one-time bonus payments, welfare services and payments, and the coverage of commuting and housing expenses. Spain considers its schemes for fixed supplements to be very complex and, those for irregular supplements to be complex, while the other important compensation categories are considered simple.

4.10.2 Introduction

Spain is a transcontinental country predominantly located on the Iberian Peninsula, in Europe. It consists of 17 autonomous communities and two autonomous cities. Mainland Spain is in southwestern Europe and borders France and Andorra in the north, Portugal in the west, and Morocco and Gibraltar in the south. Spain's territory also includes the Canary Islands in the Atlantic Ocean, the Balearic Islands in the Mediterranean Sea, and the (autonomous) cities of Ceuta and Melilla in Africa. The country measures 505,970 km² and ranks as the 51st largest country in the world and the 4th largest country in Europe. Spain has a population of 47.4 million inhabitants. In Spain, 20 percent of the population is 65 years and older. This is the 22nd highest share in the world.

Spain's GDP was 1,122 billion euro in 2020, ranking 14th in the world. The GDP per capita was 23,688 euro, ranking 42nd in the world. Spain ranks as the 33rd most complex economy in the world in the Atlas of Economic Complexity. The country is slightly more complex than expected for its income level.⁵⁷ Spain's economy relies heavily on the automotive industry, agriculture, renewable energy and tourism.⁵⁸ The employment rate in Spain is relatively low, at 61 percent, 5 percentage points lower than the OECD average.⁵⁹

Spain joined NATO in 1982 as the 16th member of the Alliance. Spain played an active role in the alliance and guided NATO through its first major peacekeeping operation.⁶⁰ Spain has 2.18 percent of its military personnel deployed abroad. This equates to 2,974 military employees. The largest share, 609 employees, are in the European Union Training Mission in Mali. Spain also has forces deployed in NATO missions. Global security is a fundamental priority for Spain, including combating terrorism, organized crime and cyber-security.⁶¹

Spain has outlined the following threats and risks to national security: strategic and regional tension, terrorism and violent radicalization, epidemics and pandemics, threats to critical infrastructure, emergencies and disasters, espionage and foreign interference, disinformation campaigns, organized and serious crime, irregular migratory flows, and the proliferation of weapons of mass destruction. The following vulnerabilities are also listed as threats and risks to national security: cyberspace vulnerabilities, maritime vulnerabilities, aerospace vulnerabilities, economic and financial instability, energy vulnerability, and the effects of climate change and environmental degradation.⁶²

The Spanish Armed Forces (SPAF) are composed of the following: the Spanish Army (*Ejército de Tierra*), the Spanish Navy (*Armada*), the Spanish Air and Space Force (*Ejército del Aire y del Espacio*), the Royal Guard (*Guardia Real*), the Military Emergencies Unit (*Unidad Militar de Emergencias*), and the Common Corps (*Cuerpos Comunes de las Fuerzas Armadas*). The Common Corps are corps providing specific professional expertise that are shared by all the branches. In addition, Spain has a Civil Guard, which is one of two national policy forces and operated jointly by the Ministry of the Interior and the Spanish Ministry of Defence (EMAD). The role of the EMAD is limited, except in times of war, when the ministry has exclusive authority. It is a national gendarmerie force, and undertakes specific foreign peacekeeping missions. Spain has three coast guard agencies. Salvamento Marítimo is responsible for maritime traffic control, safety and rescue operations, as well as protection of the maritime environment. It has no law enforcement responsibilities and is a part of the Ministry of Transport, Mobility, and Urban Agenda. The Customs Surveillance Service is a law enforcement agency under the Ministry of Finance with maritime customs responsibilities. The Civil Guard carries out border protection functions.

⁵⁷ <https://atlas.cid.harvard.edu/countries/71>

⁵⁸ <https://www.worldatlas.com/articles/the-biggest-industries-in-spain.html>

⁵⁹ <https://data.oecd.org/emp/employment-rate.htm>

⁶⁰ https://www.nato.int/cps/en/natohq/declassified_195140.htm

⁶¹ <https://www.exteriores.gob.es/en/PoliticaExterior/Paginas/SeguridadGlobal.aspx>

⁶² The National Security Council (2021). National Security Strategy 2021.

4.10.3 Defense expenditures

The Spanish defense expenditures were 11.24 billion euro in 2020. This represents 1.0 percent of the GDP in Spain. Spain's military spending as a share of GDP has hovered around 0.9 percent in the past 10 years. In absolute numbers, Spain spends the 17th most globally on its military.

NATO reports the distribution of defense expenditures on personnel, infrastructure, equipment, and other components. Figure 4.100 shows this distribution. Personnel expenditures is the largest component in the Spanish defense expenditures, at 62.5 percent. The figure also shows that equipment, infrastructure, and other components make up 19.4, 1.1, and 17 percent of the expenditures, respectively.

We only have qualitative judgements regarding the distribution of personnel expenses. The largest shares of the personnel expenses are base salary and fixed supplements. Pension earnings and tax exemptions also make up large parts of expenses. One-time bonus payments, welfare services and payments, and commuting and housing expenses are moderate-sized components of the expenses, civilian education is a small part, and irregular supplements are negligible.

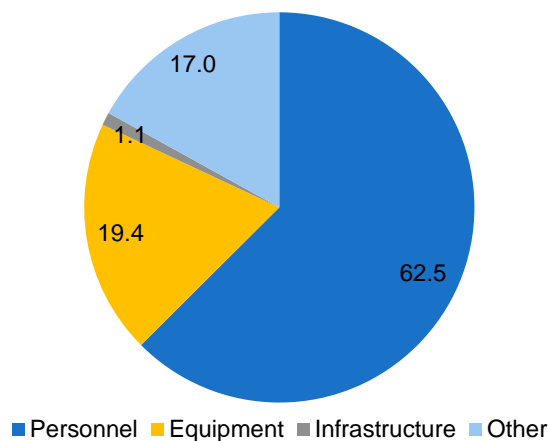


Figure 4.100 Distribution of defense expenditures, in percent. Source: NATO.

4.10.4 The personnel situation

There are 160,402 personnel in the SPAF. There are 29,146 officers; 29,197 other ranks; 15,833 civilians; and 3,132 reservists in SPAF. Spain abolished its conscription system in 2001, but the Spanish Government still has the right to mobilize citizens between 19 and 25 years old in the case of a national emergency.⁶³ In addition, Spain has a national gendarmerie force – the Civil Guard – that accounts for 83,094 employees.

Figure 4.102 shows the number of military personnel by branch and rank. The Army, the Navy, and the Air Force have 31,580; 8,861; and 12,501 military personnel, respectively. In addition,

⁶³ https://www.indexmundi.com/spain/military_service_age_and_obligation.html

there are 1,523 military personnel in the Marines, and 3,878 military personnel in other parts of the SPAF.

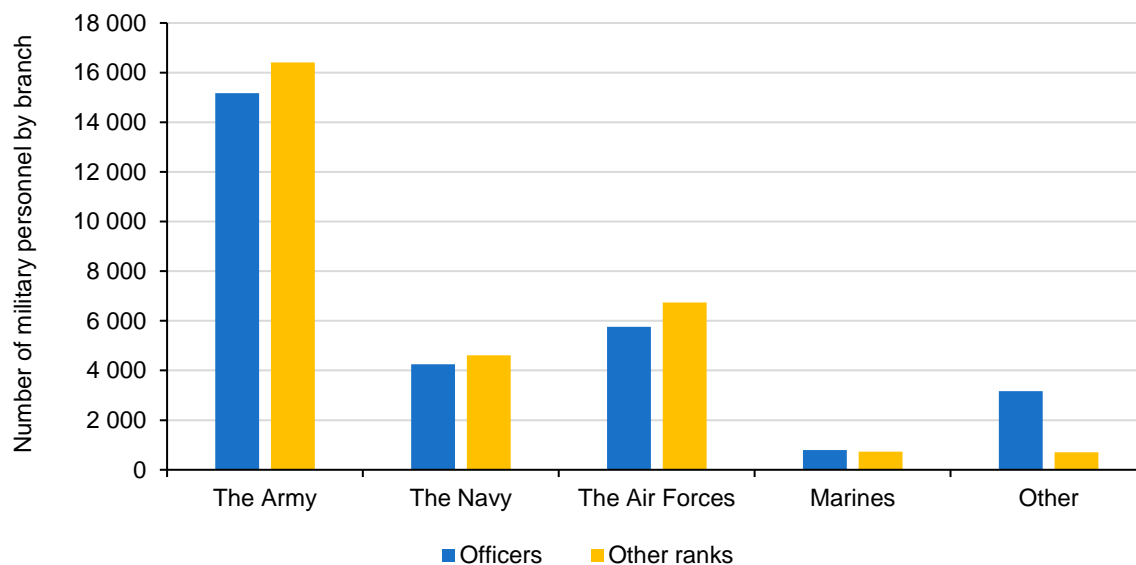


Figure 4.101 Number of military personnel, by branch and defense institution, officers and other ranks. Source: The EMAD.

Figure 4.102 shows the shares of officers by branch and other institutions. Most of the officers work in the Army. The Navy, the Air Force, and the Marines account for 14.6, 19.8, and 2.7 percent of officers, respectively. The branch we call other, which includes the Common Corps of the SPAF, employs 10.9 percent of officers.

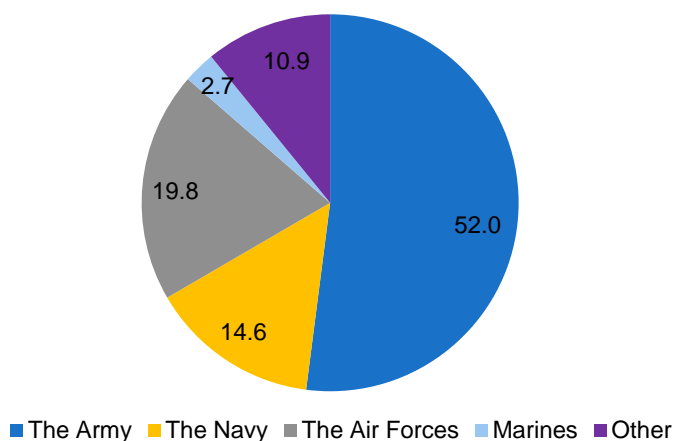


Figure 4.102 Share of officers by branch and defense institution, in percent. Source: The EMAD.

Figure 4.103 shows the shares of other ranks by branch and other institutions. Most of the other ranks work in the Army. The Navy, the Air Force, and the Marines account for 15.8, 23.1, and

2.5 percent of the other ranks, respectively. The branch we call other, which includes the Common Corps of the SPAF, employs 2.4 percent of the other ranks.

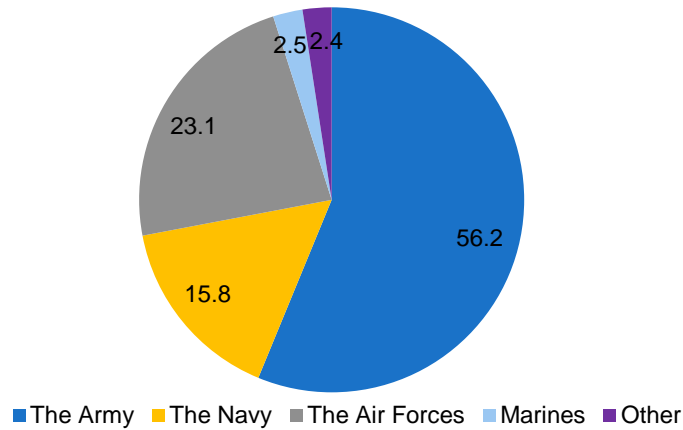


Figure 4.103 Share of other ranks by branch and defense institution, in percent. Source: The EMAD.

Figure 4.104 shows the age distribution of officers, other ranks, and civilians. The figure shows that most of the personnel are above 35 years old. More than 50 percent of the officers and civilians are between 55 and 64 years old.

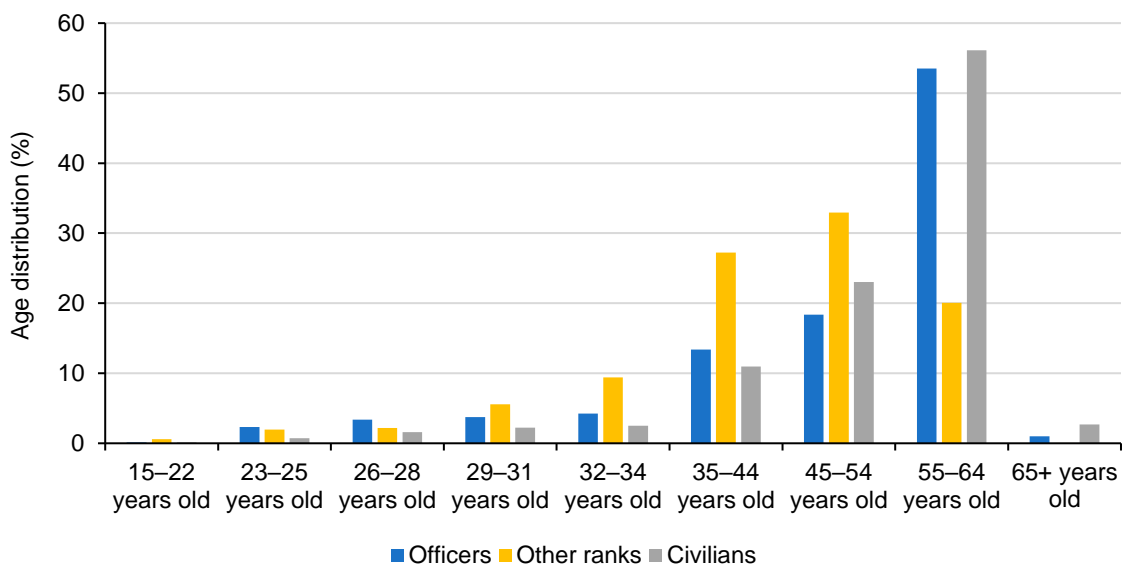


Figure 4.104 The age distribution among the officers, other ranks, and civilians, in percent (each employee group sums up to 100 percent). Source: The EMAD. Note: The figure omits personnel in the Civil Guard and reservists.

Spain has 2,974 military personnel deployed abroad. This equates to 2.2 percent of personnel. Table 4.10 shows type of mission, the mission itself, and the number of personnel involved in each mission. In missions intended to provide stability and security, there are 1,721 military

personnel deployed. Also, 513 military personnel are deployed in missions against terrorism, and 740 military personnel are deployed in deterrence and defense missions.

Table 4.10 Missions abroad.

Type	Mission	Personnel
Missions to provide stability and security	EUFOR Althea (BIH)	2
	EUTUM Central African Republic	8
	EUTUM Somalia	26
	EUTUM Mali	609
	EU NAVFOR Atalanta	350
	UNIFIL	632
	Support to Mali	86
	Monitoring peace agreement Colombia	5
	Observers and EU Liaison Officers	3
	Sum	1,721
Against terrorism missions	International coalition against daesh and NATO mission in Iraq	277
	Operation "Sea Guardian"	69
	Resolute support	167
	Sum	513
Deterrence and defense missions	Baltic Air Policy	153
	Enhanced forward presence	366
	NATO standing maritime groups	73
	Permanent air defense plan persistent effort	148
	Sum	740
Total		2,974

Source: The EMAD.

4.10.5 Compensation categories

4.10.5.1 Data description

Spain provides qualitative judgements regarding the size of the compensation categories split into age categories and no quantitative data. Spain provides an assessment of the complexity of the following compensation categories: fixed supplements, irregular supplements, one-time bonus, deployment-related payments, welfare services and payments, coverage of commuting and housing expenditures, and provision of civilian education. Spain does not provide the number of schemes for any compensation category. They do however provide the top three incentives, satisfaction level of the incentives, and whether they have been reformed the past years for fixed supplements, irregular supplements, one-time bonus, welfare services and payments, and coverage of commuting and housing expenditures. Additionally, they provide the top two incentives of provision of civilian education, top one incentive of deployment-related payments, the satisfaction level of the incentives, and whether they have been reformed the past five years.

4.10.5.2 Base salary

The basic remuneration for military personnel consists of salary; three years of service; and bonus payments twice a year, in June and December. The amounts are determined in the General State Budget Laws.

The EMAD does not report average base salary in quantitative terms. The EMAD reports that the base salary constitutes a large part of the total compensation provided to military personnel. This holds for officers and other ranks in all age groups.

4.10.5.3 Fixed supplements

Fixed supplements include the employment allowance, specific allowance, special dedication allowance and bonus for extraordinary services. The EMAD reports that the fixed supplements constitute a large part of the total compensation provided to military personnel. This holds for officers and other ranks in all age groups. The EMAD characterizes the system of fixed supplements as not very complex. We did not receive information about the number of schemes for fixed supplement in the Spanish monetary incentive system or the average fixed supplements by age groups or type of contract.

The EMAD reports the top three fixed supplements to be the 1) Employment Allowance, 2) Specific Allowance General Component, and 3) Specific Allowance Specific Component.

The Employment Allowance rewards the various responsibilities of the military profession, depending on the military job held. The level of the Employment Allowance is unique and personal and also responds to the hierarchical structure of the Armed Forces. The main purpose of the incentive is to provide for the satisfactory completion of employees' careers. The EMAD characterizes the incentive as satisfactory in terms of achieving its purposes, and it has not undergone any reforms in the past five years.

The Specific Allowance for military personnel consists of the General Component (2) and the Special Component (3). The General Component is linked to the employment attained by the military personnel. It follows an increasing hierarchical order, with amounts that increase within each category and scale, producing an overlapping of the allowance between scales. The main purpose of the incentive is to provide for the satisfactory completion of employees' career. The EMAD characterizes the incentive as satisfactory in terms of achieving its purposes, and it has undergone reforms in the past five years.

The Special Component rewards special conditions, such as responsibility, technical preparation, danger, and hardship. The main purpose of the incentive is to induce more effort. The EMAD characterizes the incentive as satisfactory in terms of achieving its purposes, and it has undergone reforms in the past five years.

4.10.5.4 Irregular supplements

The EMAD reports that irregular supplements constitute a negligible part of the total compensation provided to military personnel. In the qualitative assessment of the size of irregular supplements for officers and other ranks by age group, the EMAD reports that the value is moderate for the 15–34 age groups and medium for the 35–64 age groups. The EMAD characterizes the schemes for irregular supplement as complex. We do not have information about the number of schemes.

The EMAD reports the top three irregular supplements to be the 1) Special Dedication Allowance, 2) Extraordinary Service Bonus, and 3) Residence Allowance.

The Special Dedication Allowance is a part of the special performance bonuses, and the incentive rewards special performance, extraordinary activity, or initiative. The main purpose of the incentive is to induce more effort. The EMAD characterizes the incentive as satisfactory in terms of achieving its purposes, and it has been reformed the past five years.

The Extraordinary Service Bonus is also a part of the special performance bonuses. It rewards extraordinary work, beyond the normal working day, not including on-call duty or services. The main purpose of the incentive is to induce more effort. The EMAD characterizes the incentive as satisfactory in terms of achieving its purpose. It has not been reformed in the past five years.

Personnel who serve in certain geographical locations receive the Residence Allowance. The incentive shall in no case be applied to extraordinary payments, and personnel who receive a salary lower than the amount established in general shall receive a Residence Allowance that is reduced by the same proportion. The main purpose is to induce geographical mobility to non-mainland locations. Table 4.11 shows the monthly Residence Allowance for each classification group. The Residence Allowance is smaller for the most attractive of the non-mainland locations: Gran Canaria, Tenerife and Mallorca. Group A1 is for personnel ranked from *Teniente* (OF 1) to General (OF 9), group A2 is from *Sargento* (OR 6) to *Alférez* (OF 1), group C1 is for permanent troops, and group C2 is for temporary troops.⁶⁴

The EMAD characterizes the Residence Allowance as satisfactory in terms of achieving its purpose. It has not been reformed in the past five years.

Table 4.11 Monthly Residence Allowance, by group, in euro.

Group	Gran Canaria and Tenerife	Other Canary Islands	Valle de Arán	Mallorca	Other Balearan Islands	Ceuta and Melilla
A1	186.19	605.29	90.91	99.78	110.47	956.59
A2	152.18	435.83	65.50	80.25	96.29	712.10
C1	125.46	351.46	52.82	69.86	87.99	580.63
C2	103.43	258.46	33.78	46.32	59.52	383.01

⁶⁴https://ejercito.defensa.gob.es/Galerias/Descarga_pdf/Unidades/Madrid/pahuet/2021/TRIPTICO_PRESTACIONes_2021.pdf

E	91.37	228.28	27.40	42.93	59.02	339.54
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Source: The EMAD.

The Residence Allowance increases every third year for a few of the locations covered by the allowance. In Table 4.12, the value increase of the Residence Allowance is shown. The increase applies for military personnel living in Ceuta and Melilla and the islands of the Canary Archipelago, except Tenerife and Gran Canaria.

Table 4.12 Increases in Residence Allowance per three-year period, by group, in euro.

Group	Other Canary Islands	Ceuta and Melilla
A1	40.49	57.91
A2	30.62	44.20
C1	24.92	35.45
C2	17.01	23.88
E	12.87	17.79

Source: The EMAD.

4.10.5.5 One-time bonus payments

The EMAD does not report one-time bonuses in quantitative terms. However, the EMAD reports that the one-time bonus scheme constitutes a moderate-sized part of the total compensation to military personnel. This also holds for officers and other ranks in all age groups. The EMAD characterizes the system of one-time bonuses as simple. We did not receive information about the number of schemes.

The EMAD reports the top three one-time bonuses to be the 1) Long Service Incentive, 2) Service Bonus, 3) Bonus for Compulsory or Voluntary Transfer to the Reserves.

Military troops and sailors in a service relationship of a temporary nature may receive the Long Service Incentive in a single payment each time they meet the required conditions. The personnel may receive the payment after three, five and seven years of service, on the condition that the military personnel have served uninterruptedly in the SPAF for the 12 months prior to the third year and the 18 months prior to the fifth and seventh years. The amount of the Long Service Incentive is three times the service member's monthly salary. For a person in group C2, the amount was 1,951 euro in 2020. For a person in group A2, the amount was 3,122 euro in 2020. The main purpose of the Long Service Incentive is to provide for the satisfactory completion of employees' careers. The EMAD characterizes the incentive as satisfactory in terms of achieving its purpose. It has not undergone any reforms in the past 5 years.

The Service Bonus is an allowance paid for personnel who must leave the SPAF. The following causes of termination make personnel eligible for the Service Bonus: an expressed request on the part of the interested party with three months' notice, insufficiency of professional faculties or psychosocial conditions, or reaching the age of 45 years without acquiring the status of reservist of special availability. The value is calculated by multiplying the daily salary by the number of

years of effective service in the Armed Forces. The EMAD provides information about two types of personnel: temporary military personnel (MTM) and complementary military personnel (MILCOM). For MTM with 10 years of service, the value of the Service Bonus is 4,276 euro while for a MILCOM with the same service period, the Service Bonus is 7,913 euro. The main purpose is end-of-service allowance. The EMAD characterizes the incentive as satisfactory in achieving its purpose. It has not undergone any reforms in the past 5 years.

The Bonus for Compulsory or Voluntary Transfer to the Reserves is a bonus paid to military personnel who successfully transfer to the Reserves before reaching the age limit. The bonus is calculated based on the number of years remaining before transfer to the reserves due to age. The value of the compensation category of one-time bonus is shown in Table 4.13. If military personnel have completed 25 years of service in the Armed Forces, they can transfer to the reserves. The main purpose of this is allowance for forced change from active to reserve status. The EMAD characterizes the incentive as satisfactory in terms of achieving its purposes. It has not undergone any reforms in the past 5 years.

Table 4.13 One-time bonus for compulsory or voluntary transfer to the reserves, by rank, in euro.

Rank (NATO code)	Value
Coronel / Capitán de Navío (OF-5)	6,106
Teniente Coronel / Capitán de Fragata (OF-4)	5,385
Comandante / Capitán de Corbeta (OF-3)	4,685
Capitán / Teniente de Navío (OF-2)	3,775
Teniente / Alférez de Navío (OF-1)	3,386
Alférez / Alférez de Fragata (OF-1)	3,175
Suboficial Mayor (OR-9)	3,175
Subteniente (OR-9)	2,409
Brigada (OR-8)	2,254
Sargento Primero (OR-7)	2,143
Sargento (OR-6)	2,132
Cabo Mayor (OR-5)	1,810
Cabo Primero (Permanente) (OR-4)	1,410
Cabo (Permanente) (OR-3)	1,266
Soldado / Marinero (Permanente) (OR-1)	988

Source: The EMAD.

4.10.5.6 Deployment-related payments

The EMAD does not report deployment-related payments in quantitative terms. However, the EMAD reports that deployment-related payments constitute a large part of the total compensation paid to military personnel. This also holds for officers and other ranks in all age groups.

We do not have information about the top three incentives or the average deployment-related payments. Military personnel deployed abroad receive payments corresponding to their jobs and

posts, as well as an allowance to compensate for special conditions. The amount differs based on the type of mission and the country in which it occurs. The amount will be the sum of the monthly special dedication allowance and the temporary living allowance, as well as a percentage of the sum of salary, the employment allowance, and the general component of the specific allowance, which is established for each operation/mission.

The purpose of the deployment-related payments is to compensate service members for additional effort during deployment. The EMAD characterizes the payments as satisfactory in terms of achieving their purposes, and the system of deployment-related payments as not very complex.

4.10.5.7 Pension earnings

The EMAD does not report on pension earnings in quantitative terms. However, the EMAD reports that pension earnings constitute a large part of total compensation to military personnel. This also holds for officers and other ranks in all age groups.

The personnel receive a salary from the EMAD during the time they serve in the reserves, based on availability for service. After a service member reaches 65 years old, there is a pension scheme, as with any other worker, that does not depend on the EMAD. They will be covered by the state pension scheme or by social security if they joined after January 1, 2011. Thus, military personnel in the SPAF do not receive a special pension payment that goes beyond what other employees in the private and public sectors can expect.

4.10.5.8 Tax exemptions

The EMAD does not report on tax exemptions in quantitative terms. However, the EMAD reports that tax exemptions constitute a large part of total compensation to military personnel. The EMAD does not show how the value of tax exemptions is distributed by age group and contract type. We received neither the number of schemes in the tax exemption compensation category nor an assessment of the complexity of this compensation category in the Spanish monetary incentive system.

We do not have information about the top three tax exemptions or the average tax exemptions. However, we do have information about the following tax exemptions: 1) compensation to participants in international peace and security operations, 2) excess received by civil servants stationed abroad, 3) paternity leave.

Compensation to participants in international peace and security operations is exempted from tax if the payments are extraordinary gratuities, or because of personal injuries sustained during an international operation.

The excess received by Spanish civil servants stationed abroad is exempt from income tax. Military personnel abroad are entitled to receive compensation for the equalization of purchasing power and quality of life. The equalization of purchasing power will mitigate the effects of exchange rates and differences in price levels between the countries of destination and Spain. The compensation for quality of life is based on factors such as remoteness, climate, unhealthiness,

isolation, situation of violence or war, citizen insecurity, and other similar factors that may diminish the quality of life of the civil servant as compared to someone living in Spain.

Since January 2019, paternity leaves received by public employees, including military personnel, have been tax exempt.

4.10.5.9 Welfare services and payments

The EMAD does not report on the compensation category of welfare services and payments in quantitative terms. However, the EMAD reports that this compensation category constitutes a moderate-sized part of the total compensation to military personnel. This compensation category constitutes a medium-sized part of the compensation provided to officers and other ranks in all age groups.

Personnel do not receive specific welfare payments. However, personnel receive subsidies or discounts on services that are covered by the EMAD. The EMAD documents five schemes for welfare services and payments, and characterizes the system for welfare services and payments as simple.

The EMAD reports the following top three incentives: 1) Residences, 2) Transportation, and 3) Sociocultural and Sports Military Centers.

Residences are provided to military personnel who move or require accommodation for service-related reasons. The main purpose is welfare and social support. The purpose of these Residences is to support the geographical mobility of the Army. The EMAD characterizes the incentive as satisfactory in terms of achieving its purpose. It has not undergone any reforms in the past five years.

Transportation is the coverage of or a discount for official or private travel on the part of military personnel. Professional military personnel who can prove that they are in active service, active students, in the reserve assigned, in the second reserve, in training, in the temporary reserve, or in the voluntary reserve, will receive a 65 percent discount on the price of general tickets from Renfe, which will be paid by the EMAD. ALSA GRUPO will apply a 50 percent discount on ordinary fares. On commercial maritime fares, military personnel in the Army receive 50 percent discount. The main purpose of the incentive is to encourage geographical mobility. The EMAD characterizes the incentive as satisfactory in terms of achieving its purpose. It has not undergone any reforms in the past five years.

Sociocultural and Sports Military Centers are a social benefit for military personnel intended to support physical training and social relationships. The main purpose of the incentive is the same as for Residences: welfare and social support. The EMAD characterizes the incentive as satisfactory in terms of achieving its purpose. It has not undergone any reforms in the past five years.

4.10.5.10 Coverage of commuting and housing expenses

The EMAD does not report on the compensation category of the coverage of commuting and housing expenses in quantitative terms. However, the EMAD reports that this compensation category constitutes a moderate-sized part of the total compensation provided to military personnel. This compensation category represents a medium-sized component of the compensation provided to officers and other ranks in all age groups. The EMAD documents seven schemes of coverage of commuting and housing expenses and characterizes the system of commuting and housing expenses as simple.

The EMAD reports on the following top three incentives: 1) Housing or Compensation, 2) Moving, and 3) Commuting (temporary).

Housing or Compensation is intended to cover the expenses personnel have during service. Personnel receive a subsistence allowance, which is a daily amount intended to cover the expenses incurred via staying outside one's official residence when the period of stay is less than one month domestically, and less than three months abroad. The inherited residency allowance is the name of the allowance that personnel receive if the stay is more than one month nationally or three months abroad. Travel expenses are the amount paid for the use of any means of transport for service purposes. The main purpose of this incentive is to increase geographical mobility. The EMAD characterizes the incentive as very satisfactory in terms of achieving its purpose. It has not undergone any reforms in the past 5 years.

In the event of a compulsory transfer resulting in a change in the municipality of official residence nationally, personnel are entitled to moving compensation. The compensation is three daily subsistence allowances for the employee and each member of their family who moves, as well as for the cost of transporting furniture. The same applies to personnel who move abroad, to a new country, due to a new posting, and those who return to Spain for the same reason or due to permanent termination. When personnel are abroad for a period longer than 18 months, they receive an installation allowance, with the following maximum limits on their annual payment: eight percent in cases which one or two family members move, ten percent if three or four family members move, and twelve percent if more than four family members move. Likewise, personnel who return to Spain from a post abroad are entitled to receive an installation allowance. The main purpose of this incentive is mobility, and the EMAD characterizes the incentive as very satisfactory in terms of achieving its purpose. It has not undergone any reforms in the past 5 years.

The main purpose of the Commuting incentive is to cover additional expenditures incurred due to working in other locations. The EMAD characterizes the incentive as satisfactory in terms of achieving its purpose, and it has not undergone any reforms in the past 5 years. We do not have any further information about this incentive.

4.10.5.11 Provision of civilian education

The EMAD does not report on the compensation category of the provision of civilian education in quantitative terms. However, the EMAD reports that this compensation category constitutes a

small part of the total compensation provided to military personnel. This compensation category represents a moderate-sized component of the compensation provided to officers and other ranks in all age groups. The EMAD documents five schemes for the provision of civilian education. The EMAD characterizes the system for the provision of civilian education as simple.

The EMAD reports the following top two incentives: Early Childhood and Education Center (1), and Student Residence (2).

Early Childhood and Education Centers exist in military establishments. Work-life balance for personnel in the SPAF is one of the priorities of the EMAD, and this incentive is intended to support personnel in achieving work-life balance. The centers are also intended to integrate women into the SPAF. The children involved must be at least three months old and a maximum of three years old. The EMAD reports that the main purpose of the incentive is to encourage family reconciliation. The EMAD characterizes the incentive as very satisfactory in terms of achieving its purpose, and it has not undergone any reforms in the past five years.

Student Residence is intended to provide accommodation and meals, as well as other complementary services if necessary, to the children of career military personnel with long-term commitments. This requires that studies be conducted in official or legally authorized centers that are located in municipalities other than the parents' or legal guardians' habitual residence. The main purpose of this incentive is to support families. The EMAD characterizes this incentive as very satisfactory in terms of achieving its purpose, and it has not undergone any reforms in the past five years.

Additionally, military personnel's children are offered activities during the summer season, where it is possible. The activities are intended to fill the gap left by kindergartens and primary schools during summer. The children involved should be between three and thirteen years old. Also, if military personnel need to move from one residence to another, the schooling of their children will be protected. Personnel who are abroad will receive compensation for their minor children's schooling if the public centers that are present are very different from the official education centers in Spain.

4.11 Sweden

4.11.1 Executive summary

Swedish defense expenditures were 5.5 billion euro in 2020, representing 1.16 percent of GDP. This is a relatively low share, ranking tenth among the twelve countries studied in this report. The personnel expenditures accounted for 38 percent of the total expenditures, ranking number seven among the studied countries. The military workforce is around 15,000 personnel, and 39 percent of the military workforce is in the Army. Officers account for 40 percent of the military workforce, and other ranks account for 60 percent of the military workforce. The demographics of the military workforce is close to the median – 56 percent are less than 35 years old. This ranks sixth in our selection of countries. Sweden has a monetary incentive system in which base salary make

up the most of total personnel expenditures, while irregular supplements, pension earnings, and the coverage of commuting and housing expenses make up most of the remaining personnel expenditures. The share of base salary of the personnel expenditures is 87 percent – the highest among the nine countries. Base salary for officers increases with age, and shows medium steepness compared to the other countries studied in this report. Among other ranks, younger personnel earn less compared to older personnel relative to the other countries. Sweden spends eight percent of personnel expenditures on irregular supplements, making it the fifth highest spender on this compensation category. Officers in the age groups 26–44 years old receive on average more than the reference group (45–54 years old). Other ranks also receive higher irregular supplements in the age groups 26–34, but the magnitude of difference is smaller than for officers. Sweden is the third largest spender on the coverage of commuting and housing expenses – constituting four percent of personnel expenditures. Sweden shares the need for geographical mobility with Australia and Norway, in the context of a base structure partly located in sparsely populated areas. Sweden has a modest amount of schemes per compensation category, and finds the irregular supplements and pension earnings system to be very complex and complex, respectively. Sweden is essentially satisfied with its incentives, but has low satisfaction with one of the fixed supplements incentives.

4.11.2 Introduction

Sweden is a kingdom on the Scandinavian peninsular. It borders Norway in the west and north, and Finland to the east. Across Kattegat and Öresund, it borders Denmark. Sweden has a long coastline, with access to the Baltic Sea, Skagerrak and Kattegat. Its total area comprises 447,420 km², making Sweden the largest country in Northern Europe, and Europe's fifth largest country. Globally it ranks as number 56 by area. Sweden has a population of 10.35 million inhabitants. It ranks as the 87th largest population in the world. The population density is 25.4 per km². In Sweden, 20.3 percent of the population is 65 years and older. This is 17th highest share in the world in this regard.

Sweden is the 22nd largest economy in the world, with a nominal GDP of 476 billion euro (4,987 billion SEK) in 2020. The GDP per capita was 45,964 euro (481,701 SEK), ranking 15th in the world. Sweden is ranked as the eighth most complex economy in the world by the Atlas of Economic Complexity.⁶⁵ This means that Sweden is a diverse, technologically advanced, and sophisticated economy. Sweden is an export-oriented economy, heavily dependent on manufacturing.⁶⁶ The employment rate is 74.9 percent, which is 8.9 percentage points above the OECD average.

Sweden has for centuries exercised a security position of neutrality. This position was maintained during the Cold War. With Sweden's accession to the European Union in 1995, however, the content of neutrality was modified. The country's security and defense policy was still considered neutral and non-aligned until recently. After Russia's invasion of Ukraine in February 2022, Sweden applied for NATO membership. Previously Sweden exercised strong links to NATO

⁶⁵ <https://atlas.cid.harvard.edu/countries/208>

⁶⁶ <https://www.worldatlas.com/articles/what-are-the-biggest-industries-in-sweden.html>

without being a formal member. The Swedish Armed Forces (SWAF) have deployed over 300 personnel abroad. SWAFs missions abroad are primarily focused on peacekeeping activities to support security efforts.⁶⁷ There are missions with SWAF participation in e.g. Central African Republic, Mali, Yemen, India and Pakistan.

Sweden's main security threats stem from hostile states and extremist groups as these challenge Swedish society and values on a daily basis.⁶⁸ Through influence operations, pressure, strategic acquisitions, disinformation, espionage and physical attacks, such groups destabilize democracy.

SWAF consist of the Army (*Armén*), the Navy (*Marinen*), the Air Forces (*Flygvapnet*), and the Home Guard (*Hemvärnet*). In addition, SWAF has other departments that include the Headquarters (*Högkvarteret*), management and logistics (*Ledning och logistik*), and military colleges.⁶⁹ The Swedish Coast Guard (*Kustbevakningen*) is a civilian organization under the Ministry of Justice.

4.11.3 Defense expenditures

In 2020, Swedish defense expenditures were 5,510 million euro (57.7 billion SEK). This represented 1.03 percent of the Swedish GDP. In absolute numbers, Sweden spends the 31st most on its military in the world. The Swedish Ministry of Defence (SMOD) has reported a smaller 2019 defense budget in the survey – a total of 9 billion euro (41.1 billion SEK). Out of this budget estimate, 1,503 million euro (15.8 billion SEK) were allocated to personnel expenditures in the FY2019 budget. Personnel expenditures thus constitute 38 percent of this budget. This is shown in Figure 4.105.

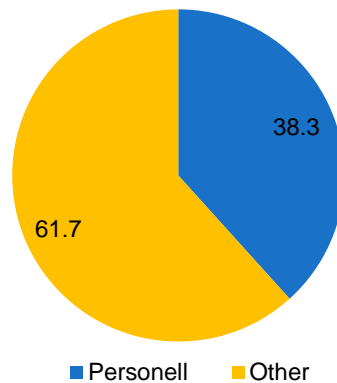


Figure 4.105 Distribution of defense expenditures, in percent. Source: The SMOD. Note: Total expenses, 2019.

Figure 4.106 shows the distribution of personnel expenditures per compensation category. The largest compensation category is base salary, which constitutes 72.1 percent of total personnel expenditures. Pension earnings constitute 17.3 percent. Irregular supplements is the third largest

⁶⁷ <https://www.forsvarsmakten.se/en/activities/current-international-missions/>

⁶⁸ [A changing threat puts Sweden's security at risk - Säkerhetspolisen \(sakerhetspolisen.se\)](https://www.sakerhetspolisen.se/sakerhetspolisen.se/).

⁶⁹ <https://www.forsvarsmakten.se/sv/organisation/#/organisation>

compensation category, at 6.7 percent of the personnel expenditures. The commuting and housing expenditures constitute 3.1 percent of the total personnel expenditures, while fixed supplements make up 0.8 percent.⁷⁰

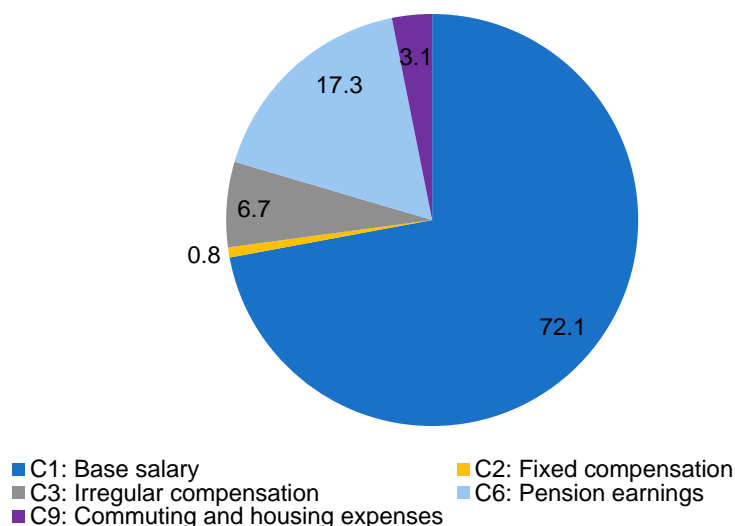


Figure 4.106 Personnel expenditures, per compensation category. Source: The SMOD. Note: C9 includes all expenditures to travel within SAF, including business trips.

4.11.4 The personnel situation

SWAF commands a personnel structure of 24,072 professionals, 11,447 reservists, and 4,270 conscripts. Sweden reintroduced military conscription in 2017, after having abandoned it in 2010. Compulsory military service is now applicable to both men and women.

Figure 4.107 shows the number of military employees by employment type and branch. The largest share of the military personnel work in the Army, and the smallest share in the Home Guard. There are substantially more other ranks in the Army and the Navy compared to the number of officers. The Air Force consists of exactly the same number of officers and other ranks.

⁷⁰ utgiftsomrade-6-forsvar-och-samhallets-krisberedskap.pdf (regeringen.se), table 2.1.

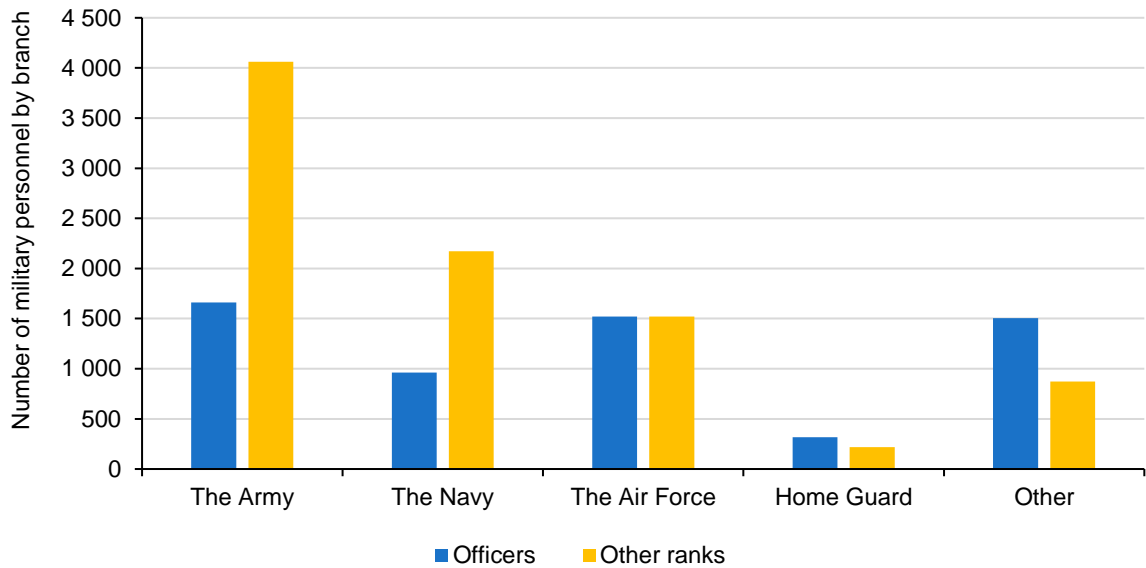


Figure 4.107 Number of military personnel, by branch and defense institution, officers and other ranks. Source: The SMOD.

Figure 4.108 shows the distribution of officers by the three branches, the Home Guard, and other institutions. The largest share of officers work in the Army, at 27.8 percent. The Navy, the Air Force, and the Home Guard employ 16.1, 25.5, and 5.3 percent of the officers. The rest of the officers – 25.2 percent – work in other defense institutions.

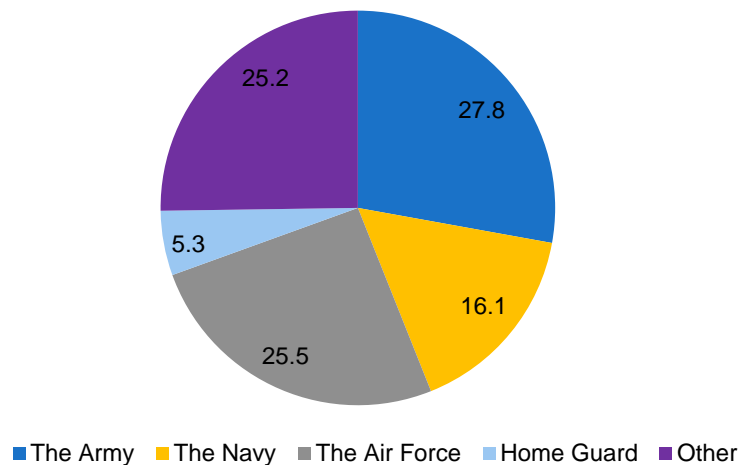


Figure 4.108 Share of officers by branch and defense institution, in percent. Source: The SMOD.

Figure 4.109 shows the distribution of other ranks by the three branches, the Home Guard, and other institutions. The largest share of other ranks work in the Army, at 45.9 percent. The Navy, the Air Force, and the Home Guard employ 24.6, 17.2, and 2.5 percent of the other ranks. The rest of the other ranks – 9.8 percent – work in other defense institutions.

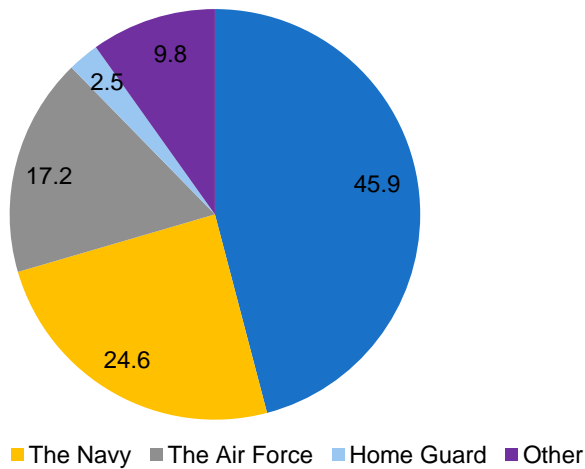


Figure 4.109 Share of other ranks by branch and defense institution, in percent. Source: The SMOD.

Figure 4.110 shows the age distribution among personnel categories in SWAF. Almost all of the conscripts are in the youngest age group. The distribution of other ranks and officers are the opposite of each other – about 70 percent of other ranks are younger than 32 years, and nearly 90 percent of the officers are older than 32 years. Most of the civilians are above 34 years old.

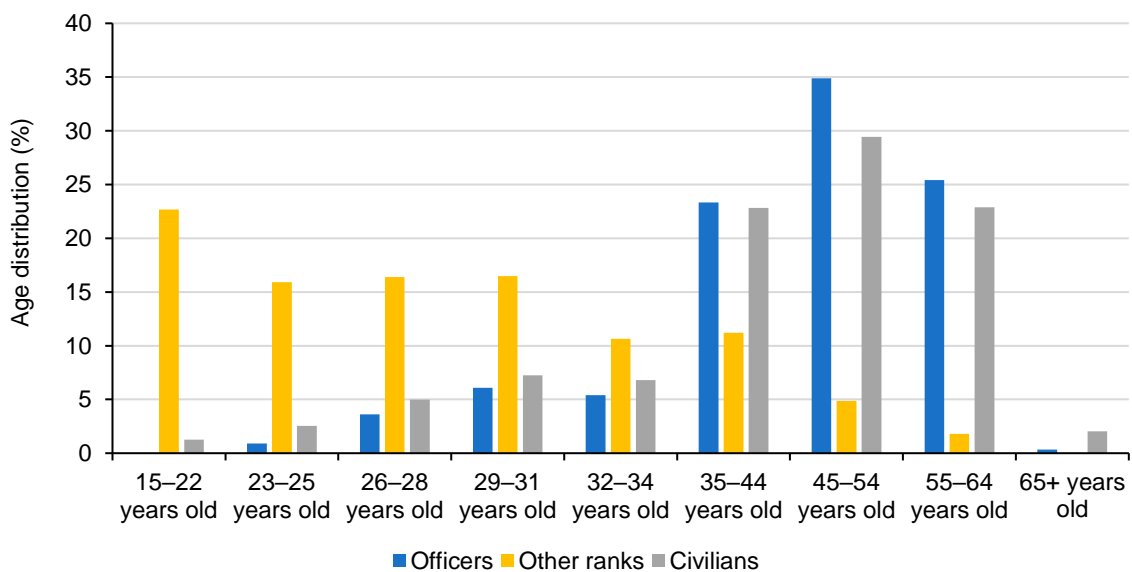


Figure 4.110 The age distribution among the officers, other ranks, and civilians, in percent (each employee group sums up to 100 percent). Source: The SMOD.

In 2020, SWAF had 332 personnel deployed abroad. SWAF does not distinguish between peacetime establishment and crisis establishment.

4.11.5 Compensation categories

4.11.5.1 Data description

Sweden provides average monthly figures for 2019, including all employees, also people not in service. The SMOD reports that the data for fixed supplements include all employees, including people not in service. For the other compensation categories, we do not know whether the payments are per employee or per recipient. For deployment-related payments, we assume that the monthly payments are average values per recipient. The SMOD points out that including people not in service may give a somewhat misleading picture. They provide the number of schemes and an assessment of the complexity of the following compensation categories: irregular supplements, deployment-related payments, and coverage of commuting and housing expenditures. Additionally, they provide the number of schemes for fixed supplements and an assessment of the complexity of pension earnings. The SMOD provides top three incentives, satisfaction level and whether the schemes have been reformed the past five years for fixed supplements, irregular supplements, deployment-related payments and coverage of commuting and housing expenditures.

4.11.5.2 Base salary

General base salary raise is negotiated by employer's associations and labor unions. This means that salary raise is a product of collective bargaining. The employer's associations and labor unions derive a national raise first in the export industries, termed "the market". Then, the government will relate to the negotiation outcome for the market when the collective agreements are negotiated.

In SWAF, the wage structure is based on the personnel's tasks and the difficulty of the tasks.

Base salary is the largest compensation category, and makes up 72.1 percent of total personnel expenditures. The monthly base salary in SWAF increases steadily with age, as Figure 4.111 shows. Once officers reach the age group 45–54, the base salary only increases with 50 euro on average. For other ranks, the average increase is 220 euro from the age group 45–54 to the age group 55–64. However, the increase for other ranks in the other age groups is smaller than for officers.

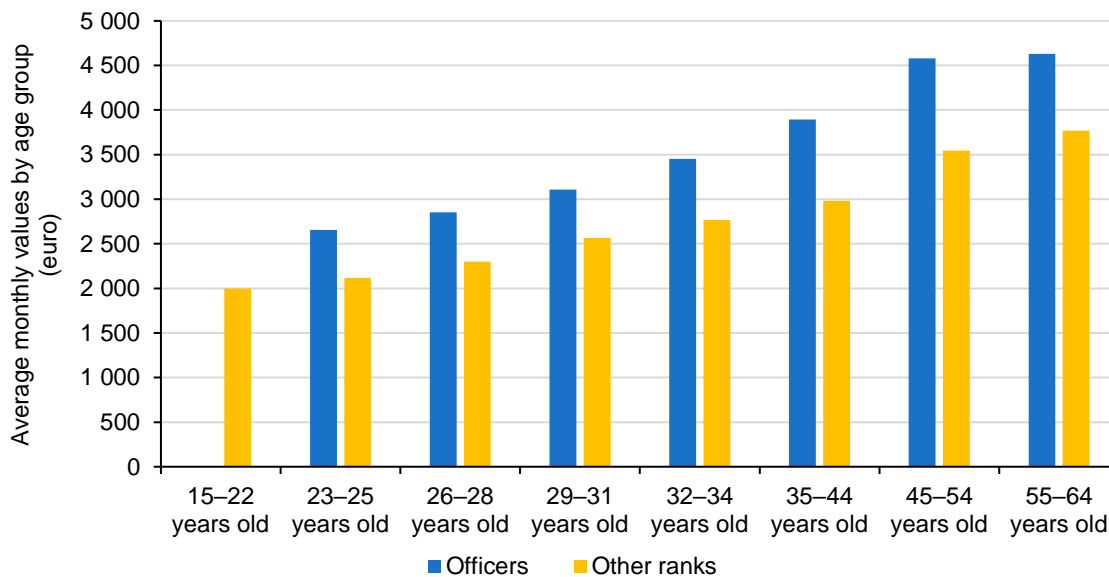


Figure 4.111 Average monthly base salary for officers and other ranks, by age group, per employee, in euro. Source: The SMOD. Note: The oldest age group – 65+ years old – is omitted due to few employees.

4.11.5.3 Fixed supplements

Fixed supplements play a relatively small role in SWAF. Only around one percent of the SWAF personnel expenditures are fixed supplements. For personnel receiving fixed supplements, however, the fixed supplements play a more substantial role in total compensation.

There are nine schemes for fixed supplements. The SMOD does not report the complexity for the system of fixed supplements.

Figure 4.112 shows the average monthly fixed supplements for officers and other ranks by age groups. Personnel on leave of absence are included in the calculation of average fixed supplements, meaning that the numbers in the figure are slightly misleading. For officers, the variation is high between the age groups, and the amount gets lower with age. For other ranks, the variation between age groups is smaller, and the level of fixed supplements does not follow a particular pattern. The highest amount is 71 euro for officers and 27 euro for other ranks, and the lowest amount is 9 euros for both.

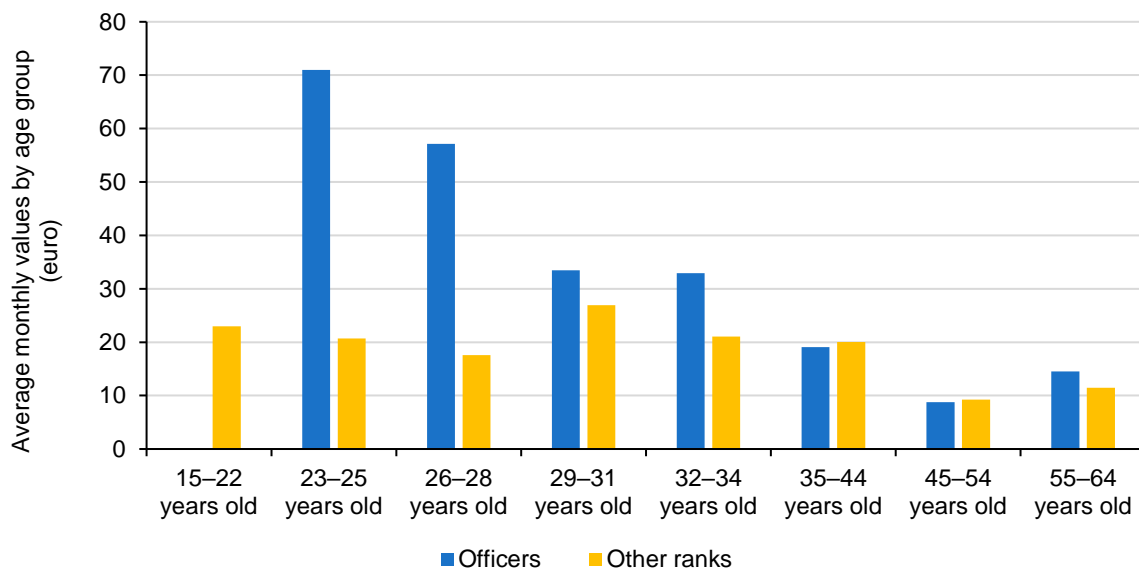


Figure 4.112 Average monthly fixed supplements for officers and other ranks, by age group, per employee, in euro. Source: The SMOD. Note: The oldest age group – 65+ years old – is omitted due to few employees.

The SMOD reports the top three fixed supplements to be the 1) Sea Allowance, 2) Diving Allowance, and 3) Pilot Education Allowance.

The Sea Allowance is paid to personnel on board on SWAF’s ships. The main purposes of the incentive are to improve recruitment and higher retention rates. The SMOD characterizes the incentive as satisfactory in achieving its purposes. The scheme has been reformed the past five years.

The Diving Allowance is paid to employees who perform diving activities and have the appropriate diving competence, or diving leader competence. The main purposes of the incentive are to improve recruitment and higher retention rates. The SMOD characterizes the incentive as satisfactory in achieving its purposes. The scheme has not been reformed the past five years.

The Pilot Education Allowance is paid to personnel that undertake pilot education. The main purposes of the incentive are to improve recruitment and increase retention rates. The SMOD expresses low satisfaction with the incentive’s ability to fulfill its purposes. The scheme has not been reformed the past five years.

4.11.5.4 Irregular supplements

Irregular supplements constitute 6.7 percent of the SWAF personnel expenditures. On average, irregular supplements play a greater role than fixed supplements in the compensation package to military personnel.

There are thirteen schemes within the compensation category irregular supplements. The SMOD considers the system for irregular supplements to be not very complex.

Figure 4.113 shows the average irregular supplements by age groups for officers and other ranks. For each age group, other ranks get a higher average monthly amount of irregular supplements than officers do.

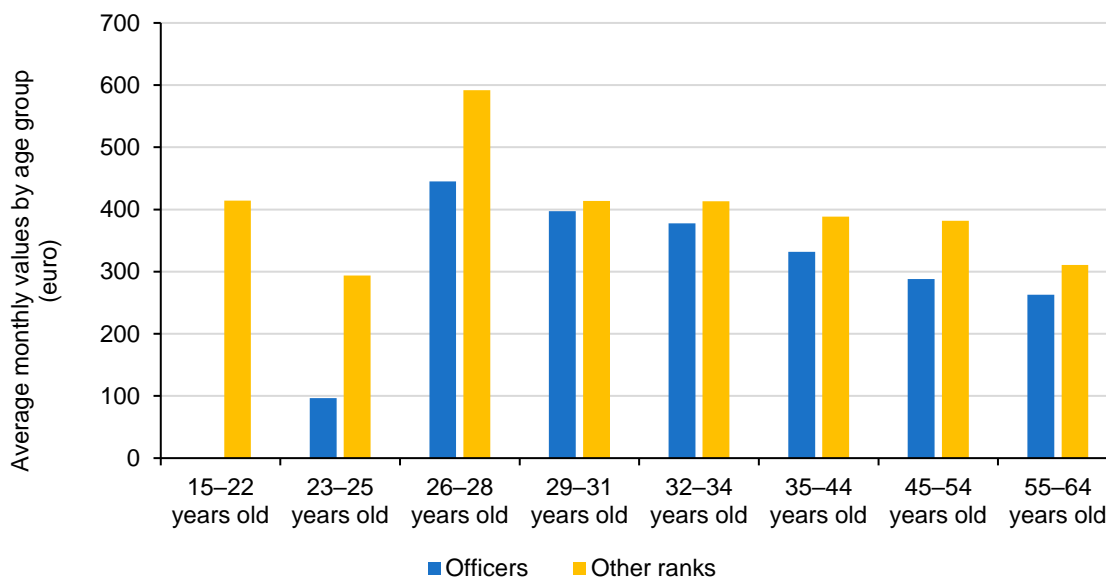


Figure 4.113 Average monthly irregular supplements for officers and other ranks, by age group, per employee/recipient, in euro. Source: The SMOD. Note: The oldest age group – 65+ years old – is omitted due to few employees.

The SMOD reports the top three irregular supplements to be 1) SWAF Days, 2) Overtime, and 3) Sea Days.

The use of SWAF Days are primarily for days (24 hours) when the employee’s working hours are not regulated by standard regulations. SWAF Days are usually applied during exercises, but can also be used for other types of activity. When working SWAF Days, the employee receives a fixed compensation, in addition to eight hours compensation time. This holds for the first 10 SWAF Days within a calendar year, and from SWAF day number eleven, the employee receives four hours compensation time. The purposes of the incentive are to improve recruitment, higher retention rates, induce more effort, and create availability of labor. The SMOD is highly satisfied with the incentive in achieving its purposes. The scheme has been reformed the past five years.

Overtime is paid for work beyond the planned working hours. Overtime is paid out in cash or in compensation hours. The purposes of the incentive are to improve recruitment and higher retention rates. The SMOD is satisfied with the incentive in achieving its purposes. The scheme has not been reformed the past five years.

Sea Days is a period of 24 hours with planned activities/exercises or education at sea or on shore. The purposes of the incentive are to improve recruitment, higher retention rates, and induce more effort. The SMOD is satisfied with the incentive in achieving its purposes. The scheme has been reformed the past five years.

4.11.5.5 *One-time bonus payments*

SWAF has no bonus system for its military employees.

4.11.5.6 *Deployment-related payments*

SWAF has six deployment-related schemes. The terms of international military activity is regulated in the collective agreement between SWAF and the labor unions. The SMOD characterizes the system for deployment-related payments as not very complex.

Figure 4.114 shows deployment-related payments per age group for officers and other ranks. The level of payment increases with age for both officers and other ranks. Officers in all age groups, except the youngest, receive higher average monthly deployment-related payments than other ranks do. The difference is however relatively small. The average payment is 3,686 euro for officers and 3,525 euro for other ranks.

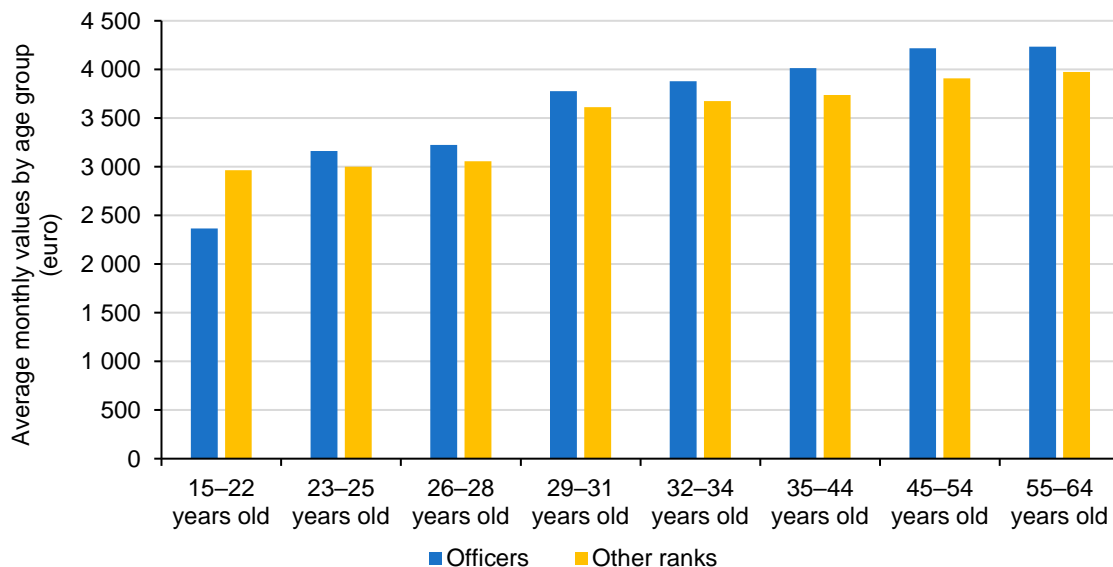


Figure 4.114 *Deployment-related payments by rank and age group, per recipient, in euro.*
 Source: The SMOD. Note: The oldest age group – 65+ years old – is omitted due to few employees.

The SMOD reports the top three deployment-related payments to be the 1) Factor Salary, 2) Activity Allowance, and 3) Abroad Allowance.

The Factor Salary is the higher salary the employees receive when they serve in international military activities. The amount is defined by basic salary * 1.3 + 766 euro (8000 SEK). The

purposes of the incentive are to improve recruitment, higher retention rates, induce more effort, and incentivize deployment abroad. The SMOD characterizes the incentive as satisfactory in achieving its purposes. The incentive has not been reformed the past five years.

The Activity Allowances are based on the risks in the activity area the personnel serve in. The purposes of the incentive are to improve recruitment, higher retention rates, and incentivize deployment abroad. The SMOD characterizes the incentive as satisfactory in achieving its purposes. The incentive has not been reformed the past five years.

The Abroad Allowance covers the additional expenditures that the employees have when serving in an activity area. Employees with children receive a higher Abroad Allowance. The purposes of the incentive are to improve recruitment, higher retention rates, and incentivize deployment abroad. The SMOD characterizes the incentive as satisfactory in achieving its purposes. The incentive has not been reformed the past five years.

4.11.5.7 Pension earnings

Pension earnings constitute 17.3 percent of the SWAF personnel expenditures. The pension system for military personnel in SWAF is complex. All personnel in SWAF are participating in the General Pension System (GPS) in Sweden.

The General Pension System consists of two elements. The first element in the GPS is a Pay-As-You-Go system where 16 percent of current employees’ pensionable earnings are added to a theoretical “pension account”. The second element in the GPS is an additional pension earning actually saved in funds that the individual can manage. Of the current employees’ pensionable earnings is 2.5 percent added to this actual account. The maximum pensionable income for earning pension in the GPS is 4,380 euro per month (45,900 SEK). The minimum retirement age in the GPS depends on the birth year. The retirement age is shown in Table 4.14. The minimum retirement age increases by birth year because it is adjusted to the rise in average life expectancy.

Table 4.14 The minimum retirement age in the GPS by birth year. Source: The SMOD.

Birth year	Minimum retirement age
1959/1960	62
1961/1962	63
1963–1970	64
1971–1985	65
1986 and after	66

Government employees at the state level also enjoy a separate State Service Pension (SSP). The current SSP was introduced in 2016 (under the name PA 16) and has two versions, Version 1 and Version 2. Version 1 holds for all state employees born in 1988 or later, including officers and other ranks. Version 2 holds for state employees born before 1988. Version 2 is different for military and civilian personnel. We summarize only for military personnel below.

The SSP Version 1 consists of three parts: 1) the Electable Part, 2) Kåpan Service, and 3) Kåpan Flexible. The employer pays 6 percent of gross monthly income into these three parts, with a division of 2.5, 2 and 1.5 percent in the Electable Part, Kåpan Service, and Kåpan Flexible, respectively. If the monthly salary is above 4,067 euro (42 625 SEK), the employer pays 31.5 percent divided into 20, 10, and 1.5 percent of the additional gross income on the three parts, respectively. State employees can choose the pension insurance provider for the Electable Part. The base provider is Kåpan Pensioner. For the two other, the provider is Kåpan Pensioner, in accounts with a guaranteed return. The employee starts earning pension in Version 1 once he/she starts working.

The SSP Version 2 (for military personnel) consists of four parts: 1) the Electable part, 2) Kåpan Service, 3) the Defined Benefit Retirement Pension (DBRP), and 4) Kåpan Extra. As in Version 1, the employer pays 2.5 percent and 2 percent to the Electable Part and Kåpan Service, but there is no threshold where the employer pays a higher rate in these two parts. The DBRP is a benefit targeted at the gap between traditional military personnel special retirement age and the general retirement age. Military employees can start receiving the DBRP when turning 61 years old. Until turning 65 years old, all military personnel in Version 2 can receive the DBRP. If employed in 30 years, employees receive the maximum DBRP. If the employee has maximum service time, the pension is usually around 68 to 73 percent of the monthly salary prior to retirement. After turning 65 years old, the value of DBRP depends on the age cohort. Employees born before 1975 receive the DBRP based on the average salary the last five years prior to retirement. Employees born in 1975 or after have a right to a DBRP if the annual income is higher than 47,805 euro (501,000 SEK). Kåpan Extra is a pension addition for military personnel employed before January 1, 2008. This part compensates for the increase in the retirement age. The employer pays a rate that depends on the birth year. For example, the rate is 4.7 percent of the gross monthly salary for employees born in 1960 and 1.3 percent for employees born in 1987. The employee starts earning pension in Version 2 at the age of 23.

4.11.5.8 Tax exemptions

Swedish tax legislation stipulates that food and trips for employees serving in an international military operation shall not be benefit taxed. Even in unit exercises within SWAF where free food is offered, the benefit value for food can be adjusted by 50 percent.

The SMOD does not report figures for tax exemptions. However, the SMOD points out that the tax exemptions probably are greatest in the age groups who most often go on interventions and who often participate in union exercises (26–35 years). The SMOD reports that they cannot explain the actual purpose of these tax exemptions as this is regulated in Swedish law.

4.11.5.9 Welfare services and payments

SWAF has no schemes for welfare services and payments.

4.11.5.10 Coverage of commuting and housing expenditures

Commuting and housing compensation constitutes 3.1 percent of the total SWAF personnel expenditures. The SMOD reports that there exists three schemes in the system of commuting and housing expenses, and they characterizes it as not very complex. Service travels are not discussed in this compensation category because the terms for service travels are not unique to SWAF. The terms for compensation of commuting and housing are regulated in a specific collective agreement with the labor unions.

Figure 4.115 shows the average commuting and housing payments by age groups for officers and other ranks. For other ranks, the average level of commuting and housing expenditures increases with age. For officers, the average amount is highest for personnel in the age group 23–25 years old and in the age group 45–54 years old.

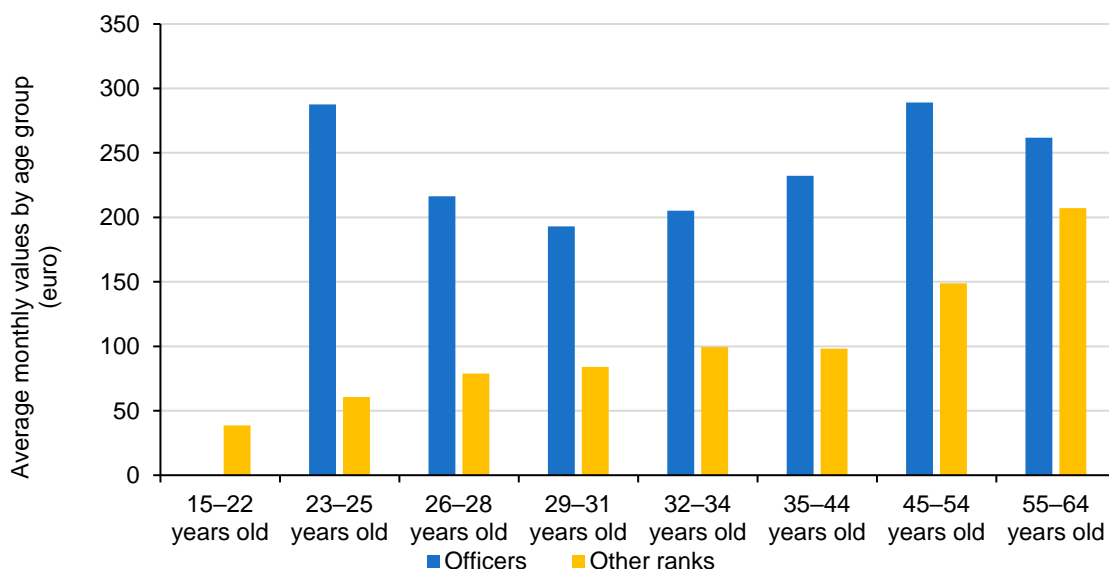


Figure 4.115 Commuting and housing payments for officers and other ranks, by age group, per employee/recipient, in euro. Source: The SMOD.

The SMOD reports the top three commuting and housing payments to be the 1) Weekly Commuting Allowance, 2) Daily Commuting Allowance, and 3) Move Compensation.

Employees receive the Weekly Commute when they have a time-limited placement in a new work location, and when it is impossible to commute daily from ordinary home address and new work location. In such cases, SWAF pays the rent or provides housing in the new location as well as coverage of expenses for travels back and forth to the regular place of work. In addition to the commuting and housing expenditures, the employee receives a monthly compensation that intends to cover the additional costs that commuting entails. The purpose of the incentive is to increase the geographical mobility of the personnel. The SMOD characterizes the incentive as satisfactory in achieving its purpose. The incentive has been reformed the past five years.

Employees can obtain the Daily Commuting Allowance if the employee receives a time-limited placement in a new location, where it is possible to commute daily between the new location and the former location of the regular work. In these cases, SWAF reimburses the cost of commuting. The purpose of the incentive is to increase the geographical mobility of the personnel. The SMOD characterizes the incentive as satisfactory in achieving its purpose. The incentive has been reformed the past five years.

An employee can receive the Move Compensation when the employee gets a new permanent work location, and moves to the new place. Move Compensation includes, among other things, visitor travel, transportation of household goods, reimbursement of moving costs, and double rent. The purpose of the incentive is to increase the geographical mobility of the personnel. The SMOD characterizes the incentive as satisfactory in achieving its purpose. The incentive has been reformed the past five years.

4.11.5.11 Provision of civilian education

SWAF has no schemes for civilian education.

4.12 The United Kingdom

4.12.1 Executive summary

The defense expenditures of the UK were 55.7 billion euro in 2020, representing 2.3 percent of GDP. This is the highest share among the twelve countries studied in this report. Personnel expenditures accounted for 33.8 percent of total expenditures, which is a relatively low share – ranking tenth. The military workforce is around 145,000 personnel, and 55 percent of the military workforce is in the Army. Officers account for 19 percent of the military workforce, and other ranks account for 81 percent of the military workforce. The demographics of the military workforce skew relatively young – 65 percent are less than 35 years old. This ranks third in our selection of countries. The UK has a monetary incentive system in which fixed supplements play a substantial role, representing 12.5 percent of personnel expenditures. Fixed supplements include X-factor, Recruitment and Retention Payments, and Enhanced Basic Pay. X-factor is added to Base Pay to form what the UK defines as Basic Pay in the pay system. The UK uses one-time bonus payments in the form of Financial Incentives, which are targeted, short-term measures to address attrition of personnel. Deployment-related payments and the coverage of commuting and housing expenses also play an important part of the UK's monetary incentive system.

4.12.2 Introduction

The United Kingdom (UK) of Great Britain and Northern Ireland is located off the northwestern coast of mainland Europe. The UK is comprised of England, Wales, Scotland, Northern Ireland, and many smaller islands within the British Isles. Northern Ireland borders the Republic of Ireland in the south. The UK has France and Belgium as close neighbors across the English Channel. The UK Continental Shelf connects to the Dutch, German, Danish, and Norwegian Continental Shelf in the east. The Atlantic Ocean, the English Channel, the Irish Sea, and the Celtic Sea surround

the country. The UK covers 243,610 km² and is the 79th largest country in the world. The UK has 67.1 million inhabitants as of 2020, making it the 22nd largest population in the world. The population density is 277.3 per km². In the UK, 18.7 percent of the population is 65 years and older. This is 29th highest in the world in this regard.

The UK is the fifth largest economy in the world, with a nominal GDP of 2,419 billion euro (2,150 billion GBP) in 2020. The GDP per capita was 36,057 euro (32,056 GBP), ranking 27th in the world. The UK ranks as the 10th most complex economy in the world by the Atlas of Economic Complexity. The economy in the UK relies mainly on the service industry and manufacturing industry.⁷¹ The employment rate is 75.4 percent, which is 9.4 percentage points higher than the OECD average.⁷²

The UK is a founding member of NATO and has always been an active contributor. In absolute numbers, the UK has the second highest military expenditures among the NATO-countries, after the United States. The UK has a permanent seat in the UN Security Council. On April 1, 2022, 5 890 military personnel were stationed overseas. This represents 4 percent of the military workforce.⁷³ Around two thirds of these were in Europe (65 percent), while 15 percent were stationed in North America, 7 percent in North Africa and the Middle East, and 6 percent in Sub-Saharan Africa. There were 4,810 MOD civilian personnel based overseas as of January 1, 2022.⁷⁴

The main threats to the UK are terrorism, cyber threats, espionage, and the proliferation of weapons of mass destruction.

The British Armed Forces (BAF) consist of the following three branches: The Royal Navy/Royal Marines, the British Army, and the Royal Air Force. The UK has a coastguard called His Majesty's Coastguard (HMCG), but it is not a military force or law enforcement agency. The Royal Navy is responsible for coastal defense and border protection. HMCG is a part of the transport secretary and responsible for the coordination and initiation of all maritime search-and-rescue operations.

4.12.3 Defense expenditures

In 2020, UK defense expenditures were 55.7 billion euro (49.5 billion GBP). This represented 2.3 percent of GDP in 2020 and was among the highest spending rates among NATO members. It is also the largest share of GDP spent on military expenditures from 2015 until 2022 in the UK. During the last two decades, the UK has been above the two percent NATO defense spending target. In absolute numbers, the UK spends the sixth most on its military in the world.

NATO reports the distribution of defense expenditures on personnel expenditures, infrastructure, equipment, and other components for all member countries. Figure 4.116 shows the distribution

⁷¹ <https://www.worldatlas.com/articles/what-are-the-biggest-industries-in-the-united-kingdom.html>

⁷² [United Kingdom - OECD Data](#)

⁷³ [UK defence personnel statistics - House of Commons Library \(parliament.uk\)](#).

⁷⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1088138/ALS_-_April_2022.pdf.

of the UK defense expenditures. The UK spent 33.8 percent of its defense expenditures on personnel in 2020. Infrastructure constitutes a small amount of expenditures, at 1.7 percent. Equipment constitutes 23.8 percent of the expenditures. The largest share of expenditures is the “other” category. We do not have any further information about this category.

In the RFI, the UKMOD does not report personnel expenditures or the distribution of personnel expenditures between the various compensation categories.

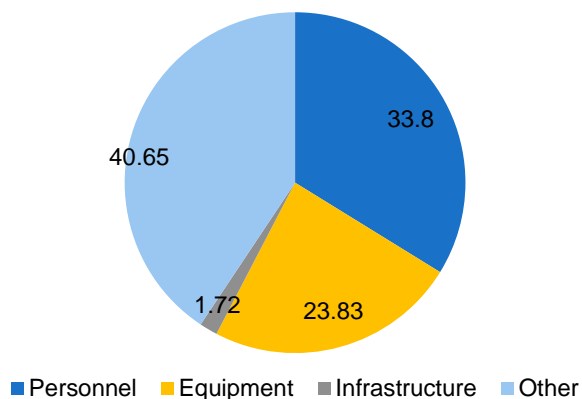


Figure 4.116 Distribution of types of expenditures in the UK defense, in percent. Source: NATO.

4.12.4 The personnel situation

The BAF employs 145,320 military personnel as of October 1, 2020. There are 27,320 officers and 117,560 other ranks. The UK has an all-volunteer military force and no conscription system. Figure 4.117 shows the number of military personnel by branch and rank. The number of other ranks in all three branches are considerably higher than the number of officers. There are 79,620 personnel serving in the Army, representing more than half of total military personnel. There are about the same number of personnel in the Navy and the Air Force.

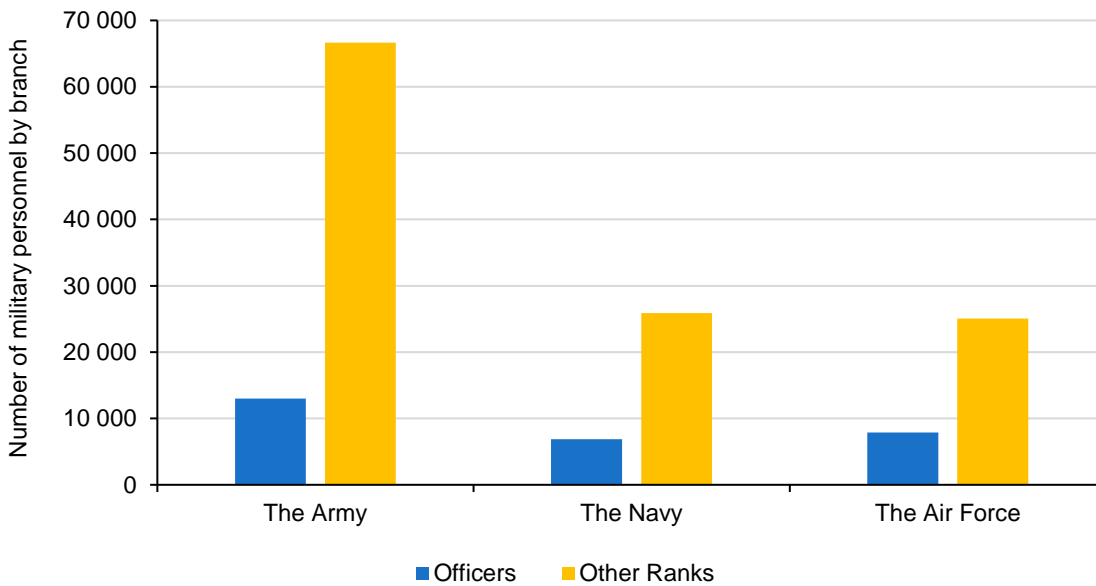


Figure 4.117 Number of military personnel, by branch, officers and other ranks. Source: [UK armed forces biannual diversity statistics: October 2021 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/100000/uk-armed-forces-biannual-diversity-statistics-october-2021.pdf).

Figure 4.118 shows the distribution of officers by branch. The largest share of officers work in the Army, at 46.8 percent. The Royal Navy and the Air Force employ 24.8 and 28.4 percent of the officers, respectively.

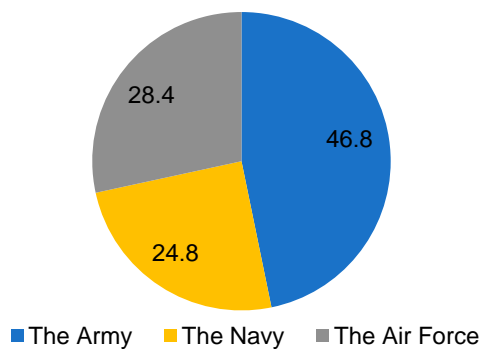


Figure 4.118 Share of officers by branch, in percent. Source: [UK armed forces biannual diversity statistics: October 2021 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/100000/uk-armed-forces-biannual-diversity-statistics-october-2021.pdf).

Figure 4.119 shows the distribution of other ranks by branch. Most of the other ranks work in the Army – 56.7 percent. The Royal Navy and the Air Force employ 22.0 and 21.3 percent of the other ranks, respectively.

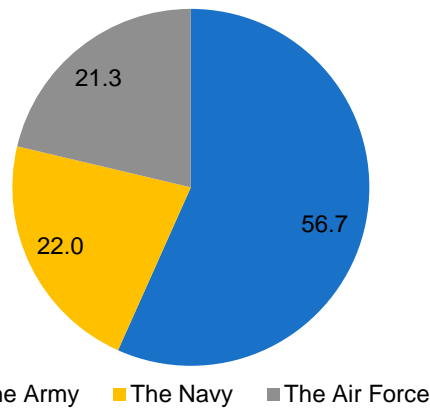


Figure 4.119 Share of other ranks by branch. Source: [UK armed forces biannual diversity statistics: October 2021 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/101222/uk-armed-forces-biannual-diversity-statistics-october-2021.pdf).

The age distribution among the personnel is shown in Figure 4.120. The demographic structure of the BAF skew relatively young, with more than 20 percent of personnel being between 25 and 29 years old. The officers are, as expected, older than other ranks on average. The average age among officers is 37 years, and the average age among other ranks is 30 years.

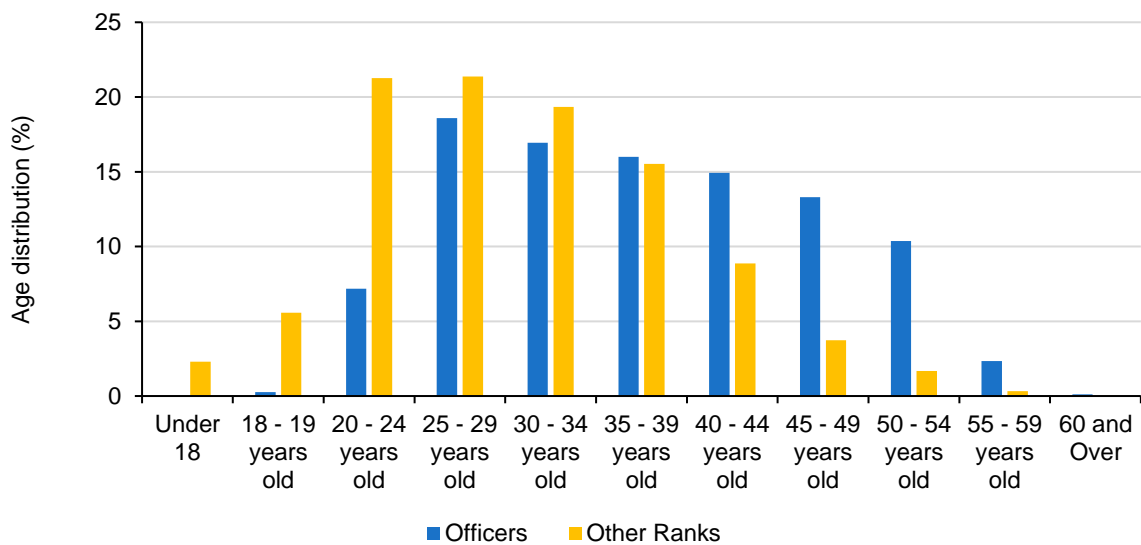


Figure 4.120 The age distribution among the officers and other ranks, in percent (each employee group sums up to 100 percent). Source: [UK armed forces biannual diversity statistics: October 2021 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/101222/uk-armed-forces-biannual-diversity-statistics-october-2021.pdf).

4.12.5 Compensation categories

The UKMOD did not provide a standard reply to the RFI. Therefore, we do not have the number of schemes, an assessment of complexity, or the average amount by age groups and contract for each compensation category. The UKMOD did not report the top three incentives, their purpose,

or the satisfaction level either. Instead, the UKMOD provided a document describing the monetary incentive system in the BAF. In the following, we summarize this document.

The total pay to military personnel was 6.37 billion euro (5.66 billion GBP) in the FY 2019/20 budget.

The BAF's pay structure is built upon seven to ten components. First, Base Pay (1) and the X-Factor (2) constitute what the UKMOD defines as Basic Pay. The Basic Pay is used for calculation of a Non-Contributory Pension (3), where non-contributory means no contribution on the part of the employee. In addition to Basic Pay, military personnel receive Allowances (4), Expenses (5), Provisions (6), and Subsidized Accommodation (7). The BAF also offers some personnel Enhanced Basic Pay (8), Additional Enduring Payments (9), and Additional One-Off Payments (10).

It is straightforward to classify base pay as base salary (C1), X-factor as fixed supplements (C2), the non-contributory pension as pension earnings (C6), and subsidized accommodation as the coverage of commuting and housing expenses (C9). Also, enhanced basic pay and additional enduring payments are classified as fixed supplements (C2), and additional one-off payments are classified as one-time bonuses (C4). However, the Allowances, Expenses, and Provisions are more challenging to classify within our framework. Allowances consist of Compensatory and Contributory Allowances. The former compensates military personnel for activities, tasks, or environmental conditions endured that are not recognized in Base Pay or X-Factor. The latter provides financial assistance with additional costs due to the requirements of service. Expenses provide refunds for actual expenditures incurred by service personnel during mandated activities or service obligations. The activity must be pre-approved and represent non-discretionary expenditure. Other provisions include non-monetary values, such as help with moving or storage of personal effects.

Some of the Allowances, Expenses, and Provisions are just coverage and reimbursements of expenses personnel have in their daily working lives, and are, as such, not part of the monetary incentive system. Others represent additional payments or coverage of in-kind benefits that increase the value of the total payment package that the military personnel in the BAF receive. The twelve themes of Allowances, Expenses, and Provisions are as follows:

- Food and accommodation: the objective is to reimburse or contribute to the cost of messing when the personnel are on temporary detached duty or have no access to service messing facilities at their permanent duty station. We consider this theme not to be relevant to the monetary incentive system in the BAF.
- Official travel: the objective is to enable travel for official duty or when the service member's family is entitled to travel at public expense. We consider this theme not to be relevant to the monetary incentive system in the BAF.

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- **Commuting:** The objective is to contribute to the cost of travel for the personnel between their permanent duty station and their family home. We classify these Allowances, Expenses, and Provisions as coverage of commuting and housing expenses (C9).
 - **UK service:** the objective is to compensate for the additional costs of residing in specific locations within the UK. We classify these Allowances, Expenses, and Provisions as the coverage of commuting and housing expenses (C9).
 - **Overseas service:** the objective is to compensate for the additional costs associated with overseas assignments. We classify these Allowances, Expenses, and Provisions as deployment-related payments (C5).
 - **Separation:** the objective is to reduce the impact on personnel who experience extended family separation. We classify these Allowances, Expenses, and Provisions as the coverage of commuting and housing expenses (C9).
 - **Deployment:** the objective is to reduce the impact of deployment on personnel and their families. We classify these Allowances, Expenses, and Provisions as deployment-related payments (C5).
 - **Relocation:** the objective is to compensate for the cost of relocation for permanent assignment. We classify these Allowances, Expenses, and Provisions as the coverage of commuting and housing expenses (C9).
 - **Service Personnel's Education:** the objective is to support the training and personal development of personnel. We classify some of these Allowances, Expenses, and Provisions as the provision of civilian education (C10).
 - **Service Children's Education:** the objective is to ensure that the education of the children of personnel is not disadvantaged by family mobility during regular and consecutive assignments. We classify these Allowances, Expenses, and Provisions as welfare services and payments (C8).
 - **Clothing:** the objective is to assist with the cost of uniform upkeep or the purchase of civilian clothing for certain assignments. We consider this theme not to be relevant to the monetary incentive system in the BAF.
 - **Environmental:** the objective is to mitigate the impact of severe environmental factors for personnel assigned in certain circumstances. We classify these Allowances, Expenses, and Provisions as irregular supplements (C3).

To sum up, of the twelve themes for Allowances, Expenses, and Provisions, one is classified as an irregular supplement, two are classified as deployment-related payments, and one is classified as welfare services and payments. Four are classified as coverage of commuting and housing

expenses, one is classified as provision of civilian education, and three are classified as outside the scope of the monetary incentive system.

The annual cost of Allowances for military personnel in the BAF was reduced from around 990 million euro (880 million GBP) in FY 09/10 to around 534 million euro (475 million GBP) in FY 19/20.

Table 4.15 shows the annual allowances and expenses in million euro over the last four financial years. Allowances that cost the UKMOD more than 1 million GBP during FY 19/20 are shown in Table 4.16.

Table 4.15 Annual cost of allowances and expenses over the last four financial years, in million euro.

FY	Allowances	Expenses	Total
19/20	550	231	782
18/19	557	223	779
17/18	553	192	746
16/17	520	204	723

Source: The UKMOD.

Table 4.16 Allowances above 1 million GBP, during FY 19/20, in million euro.

Allowance	Cost
Local Overseas Allowance	119.8
Longer Separation Allowance	112.9
Continuity of Education Allowance	93.6
Get You Home	57.7
Home to Duty Travel	42.5
Operational Allowance	29.9
Disturbance Expense	21.4
Food and Incidentals Allowance	12.9
Overseas Loan Service Allowance	7.8
Northern Ireland Residents Supplement	7.2
Council Tax Relief	5.4
Attache Allowances	4.0
Recruitment and Retention Allowance (London)	3.3
Overseas Rent Allowance	2.7
Special Messing Allowance	2.4
Individual Resettlement Training Costs Grant	2.1
Service Personnel's Education	1.8
Operational Language	1.5

Source: The UKMOD.

Finally, the BAF's monetary incentive system has a subsidized accommodation component. It is imperative that the UKMOD provide high-quality subsidized accommodations because military service requires geographical mobility, including frequent moves to remote bases and changes in the terms of service. We classify subsidized accommodation as the coverage of commuting and housing expenses (C9).

4.12.5.1 Base salary

The current base salary system – Pay 16 – was the result of a reform implemented on April 1, 2016. The aim was to design a simpler system than the previous and to allow individuals to more accurately predict their future pay. Rank is the main determinant of pay. Another key characteristic of the pay model is incremental progression. Incremental progression recognizes the additional value of experience in rank and provides a positive effect on retention. The new base salary system covers all military personnel, including reservists, up to the ranks of Commodore, Brigadier, and Air Commodore (OF 6), with the exception of those who receive Enhanced Basic Pay.

The former base salary system – Pay 2000, from April 2001 – was the first pay system introduced to all three branches. It was seen as a major improvement, but over time, dissatisfaction with its complexity, shortcomings, and inefficiencies grew. One of the main challenges with the former system was that other ranks could experience a reduction in base salary when they were promoted from a high pay band in one rank to a low pay band in the next rank. The new pay system was not introduced to reduce the overall base salary bill for the UKMOD but, rather, to re-balance and thus improve the efficiency of the base salary. Pay protection was put in place when Pay 16 was introduced to ensure that no military personnel experienced a pay cut during the implementation of the new base salary model.

Pay 16 allows military personnel to more directly predict their future base salary. It also allows the UKMOD to more accurately forecast costs. The base salary in the BAF follows an incremental pay scale. This pay structure aims to reward service personnel for gaining experience in terms of rank, as well as to help retain sufficient numbers of suitably qualified and experienced personnel. The pay scales are determined by a single core pay and four pay supplements, with each rank's trade being placed into one of the four pay supplements. In the former base salary system, there were 128 permutations of the pay scales for other ranks. This reduction has increased transparency and predictability. The allocation of trades into the four supplements was conducted via a rigorous job evaluation process.

4.12.5.2 Fixed supplements

Fixed supplements play a substantial role in the BAF's monetary incentive system. Our classification of the fixed supplements in the BAF monetary incentive system consists of 1) X-Factor, 2) Recruitment and Retention Payments (RRP), 3) Enhanced Basic Pay, and 4) Separation Allowances. The BAF spends almost 15 percent of total personnel expenditures on fixed supplements.

X-Factor is a pensionable fixed supplement that recognizes the relative disadvantage of working in the BAF as compared to civilian employment. It is a reflection of the effect of net disadvantages and advantages when these are averaged across services and a full career.

All regular military personnel in the BAF receive a 14.5 percent add-on to the base pay. Together, the Base Pay (Pay 16) and X-Factor constitute Basic Pay in the BAF. X-Factor cost 787 million euro (700 million GBP) in the FY 2019/20 budget, representing 12.5 percent of total personnel pay. X-Factor is thus by far the largest fixed supplement (and the second largest component after Base Pay) in the BAF monetary incentive system.

X-Factor has played a significant role in the BAF monetary incentive system for decades. In Table 4.17, the X-Factor levels for various contracts are shown for the 1970–2018 period. Changes are shown in bold. The X-Factor has increased over time for the contract types in the table. The X-Factor value has been reduced, however, for most of the senior officers above OF 4, because the disadvantage vis-à-vis the civilian labor market is smaller in the higher ranks according to the UKMOD.

Table 4.17 Changes in X-Factor rates from 1970–2018. Changes to the X-Factor in bold.
Source: The UKMOD. Note: RG is the Royal Gibraltar Regiment.

Year	UK Regulars		UK Part-Time Reserves	RG Regulars	RG Reserves
	Male	Female	All	All	All
1970	5.00	1.00	5.00	5.00	2.50
1974	10.00	5.00	5.00	5.00	2.50
1982	10.00	7.50	5.00	5.00	2.50
1988	10.00	9.00	5.00	5.00	2.50
1990	10.50	9.00	5.00	5.00	2.50
1991	11.50		5.00	5.00	2.50
1994	12.00		5.00	5.00	2.50
2000	13.00		5.00	5.00	2.50
2003	13.00		5.00	5.00	2.50
2008	14.00		5.00	6.00	3.00
2013	14.50		5.00	6.50	3.25
2018	14.50		5.00	6.50	3.25

X-Factor includes 13 components. These components are shown in Table 4.18. The number of components was reduced from 18 to 13 in 2015.

Table 4.18 The 13 current X-Factor components.

Component
Danger
Spouse/partner employment
Danger
Separation
Job security
Hours of work
Stress, personal relationships and impact of the job
Leave
Training, education, adventure training and personal development
Promotion and early responsibility
Autonomy, management control and flexibility
Individual, trade union and collective rights
Travel to work

Source: The UKMOD.

Second, the UKMOD uses Recruitment and Retention Payments (RRP) to remain an attractive employer for groups with specific skills or competencies. The spending on RRP in the FY 2019/20 budget was 141 million euro (125 million GBP), constituting over 2 percent of total pay. Those in the BAF with a pre-defined list of occupations and skills receive daily rates of RRP to assist with various recruitment and retention requirements. RRP is provided to personnel with certain skills or competence. There are currently 16 categories of RRP:

- Flying
- Flying Crew
- Parachute and High Altitude Parachute Delivery
- Parachute Jump Instructor
- Diving
- Submarine and Submarine Supplement
- Nuclear Propulsion
- Explosive Ordnance Disposal Operators
- Hydrographic
- Mountain Leaders
- Special Reconnaissance
- Special Intelligence
- Special Communications
- SF Communications
- Nursing
- Special Forces (SF) and SF Swimmer Delivery Vehicle Troop

The capabilities requiring the most RRP support are submariners, pilots, and SF. These three groups were collectively responsible for over 60 percent of the total spending on RRP in FY 19/20. Table 4.19 shows the categories and the spending levels. RRP is subject to income tax and national insurance, but is not pensionable. RRP ceases upon promotion to OF 7. The table includes WESM, which is an abbreviation for Weapon Engineer Officers (Submariner), and EOD Operators, which is Explosive Ordnance Disposal Operators.

Table 4.19 Total budget in FY 2019/20 for RRP for full employees and reserve band, by branch, in thousand euro.

Type of RRP	Full RRP				RBRRP				Total
	Navy	Army	RAF	Subtotal	Navy	Army	RAF	Subtotal	
Diving	4,425	1,118	-	5,542	567	601	-	1,167	6,710
Submarine	26,269	-	-	26,269	3,547	-	-	3,547	29,816
Submarine Supplement	5,457	-	-	5,457	-	-	-	0	5,457
WESM	1,603	-	-	1,603	92	-	-	92	1,695
Nuclear Propulsion	4,875	-	-	4,875	471	-	-	471	5,347
Naval Service Engineer	11,197	-	-	11,197	186	-	-	186	11,383
Hydrographic	472	-	-	472	169	-	-	169	641
Mountain Leaders	589	-	-	589	52	-	-	52	640
Parachute	489	5,024	181	5,693	-	385	-	385	6,078
SF	5,105	9,196	33	14,334	383	800	-	1,183	15,517
Special Communications	-	251	-	251	-	-	-	0	251
SF Communications	789	1,778	21	2,588	91	343	-	434	3,022
Special Reconnaissance	323	3,564	14	3,900	52	426	10	487	4,388
Special Intelligence	316	1,535	204	2,055	-	-	-	0	2,055
Flying	8,231	4,939	22,900	36,070	1,359	540	1,644	3,543	39,613
Flying Crew	4	375	1,711	2,090	-	-	-	0	2,090
Parachute Jump Instructor	-	26	456	482	-	-	73	73	554
EOD Operators	-	3,009	156	3,164	-	-	-	0	3,164
Nursing	327	710	543	1 580	141	321	161	622	2,202
Total	70,470	31,524	26,220	128,214	7,109	3,415	1,888	12,412	140,625

Source: The UKMOD.

A third category of fixed supplements in the BAF is Enhanced Basic Pay. In general, military personnel, officers, and other ranks, are paid based on the same pay structure. However, some specific groups receive additional pay grades in recognition of enduring challenges regarding recruitment and retention. This different pay structure is termed Enhanced Basic Pay. The groups that are targeted with Enhanced Basic Pay are chaplains, pilots, SF, veterinarians, divers, nurses, doctors, dentists, and officers commissioned from the ranks. Enhanced Basic Pay is pensionable. Technically, the Enhanced Basic Pay is a different form of the ordinary Basic Pay structure. However, we classify it as part of fixed supplements because the reality is that these specifically targeted groups receive a higher salary than other military personnel do. Thus, it is akin to a supplement on top of the Basic Pay.

We have classified none of the twelve themes of Allowances, Expenses, and Provisions as fixed supplements. Many of these payments have a character that is aligned with the fixed supplements compensation category, but the themes are more in line with the other compensation categories, such as the coverage of commuting and housing expenses.

4.12.5.3 Irregular supplements

We classified the Environmental theme of the Allowances, Expenses, and Provision as irregular supplements. There are seven Allowances in this theme: 1) Unpleasant Work Allowance, 2) Experimental Diving Experience, 3) Service Risks Insurance Premium Refunds, 4) Refund of Nugatory Holiday Expenditure, 5) Discharge Grants for Service Personnel under Sentence, 6) Compensation for Lost and Damaged Personnel Effects, and 7) Experimental Test Allowance.

The total cost of these Allowances in FY19/20 was over 1 million euro and constituted 0.2 percent of the Allowances budget.

4.12.5.4 One-time bonus payments

The UKMOD offers Financial incentives (FIs) to assist recruitment and retention in key employment areas. FIs are targeted, short-term measures to address current or projected shortfalls in personnel. The intention is that the FIs restore personnel balance again, which will eliminate the need for FIs. The amounts are paid as lump sums and are non-pensionable. FIs are subject to income tax and national insurance contributions.

There are currently six types of FIs in use. The two that cost the most are 1) Financial Recruitment Schemes and 2) Financial Retention Incentives. The other FIs are 3) Engineer Professional Recognition Awards, 4) Rejoining Bounties, 5) Transfer Bounties, and 6) Recruit Bounty Schemes.

Financial Recruitment Schemes, or “Golden Hellos,” are aimed at encouraging individuals to join specific trades within the BAF. The personnel are paid upon their successful completion of specific stages of training. Each payment will carry an associated return of service requirement. In FY 19/20, these schemes cost the MOD approximately 9 million euro (~8 million GBP).

Financial retention incentives (FRIs) are intended to increase the retention rate in certain jobs and positions. Such FRIs are paid to identified cohorts of military personnel. Criteria such as length of service and rank define the cohorts. Individuals who receive the payment must complete a return of service within the specified employment area. In FY 19/20, these programs cost the MOD over 12 million euro (~11 million GBP).

As of November 2020 the three highest value payments on offer to eligible personnel are as follows:

- 1) Tri-Service Pilots: Retention Payment 7 years after the completion of training – ~79 000 euro (70 000 GBP) in return for a 6-year return of service commitment.
- 2) Tri-Service Medical Officers: Direct Entrant Recruitment Incentive – ~56 000 euro (50 000 GBP) in return for a 5-year return of service commitment.
- 3) RN Engineering Officers: Direct Entrant Recruitment Incentive – up to ~30 000 euro (27 000 GBP) in return for a 3-year return of service commitment.

In FY 20/21, the top three incentives were as follows: 1) Tri-Service Pilots with a total cost to the UKMOD of 4.4 million euro (3.92 million GBP), 2) RN Engineering Officers with a total cost to the UKMOD of 2.1 million euro (1.84 million GBP), and 3) RN Submariner (5,600 euro [5,000 GBP]) in return for a 4-year return-of-service commitment), with a total cost to the UKMOD of 1.75 million euro (1.56 million GBP).

4.12.5.5 Deployment-related payments

We have classified two themes of Allowances, Expenses, and Provisions as deployment-related payments. These are 1) the Overseas and 2) the Deployment themes.

There are seven Overseas Allowances: 1) Overseas Furniture Provision Scheme, 2) Local Overseas Allowance, 3) Allowances for Attachés, Advisors Abroad and Embassy-Based Service Support Staff Overseas, 4) European Union Daily Subsistence Allowance, 5) Get You Home (Overseas), 6) Overseas Loan Service Allowance, and 7) Provision of Passports and Visas at Public Expense. The cost of (2), (3), and (6) was 131 million euro (117 million GBP) in FY19/20 and constituted 24.6 percent of spending on Allowances. The UKMOD only reports the total cost of the Get You Home schemes, not the Overseas variant.

There are three Deployment Allowances: 1) Council Tax Relief, 2) Operational Allowance, and 3) Campaign Continuity Allowance. The cost of (1)–(3) was 35.8 million euro (31.8 million GBP) in FY19/20 and constituted 6.7 percent of spending on Allowances.

4.12.5.6 Pension earnings

The current UK pension scheme established in 2015 is called “The Armed Forces Pension Scheme 2015” (AFPS 15). New entrants and rejoiners to both the Regular and Reserve Force and all existing Armed Forces Pension Scheme members (AFPS 75 and AFPS 05) transitioned to AFPS 15. The exception was personnel who were within ten years of their normal retirement age. These remained in their existing pension scheme.

The UKMOD provides a pension system that is the same for every military employee, including reservists. The pension savings begin on the first day of employment and continue throughout one’s career. The normal pension age is 60, but military personnel can ask for pension beginning at age 55. This will reduce the amount of annual pension, as the pension period will be longer.

AFPS 15 is calculated using a career average pension-scheme called Career Average Revalued Earnings (CARE). Every year of service, 2.13 (1/47th) percent of annual pensionable earnings are added to a “pension account”. The account is inflation-adjusted in order to maintain its value. There is no abatement for this pension system, in the sense that retired military personnel can continue work in the public or private sector without any reduction in pension accruals.

The UKMOD also offers an Early Departure Payment system. To qualify, military personnel must have served as a regular for at least 20 years and be at least 40 years old.

4.12.5.7 Tax exemptions

Many Expenses and some Allowances are non-taxable in the payment system. The taxable status of all Allowances, Expenses and Provisions is detailed in [JSP 752](#)⁷⁵.

4.12.5.8 Welfare services and payments

We have classified the Allowances, Expenses, and Provisions theme of Service Children's Education as welfare services and payments. There are three Allowances in this theme: 1) Continuity of Education Allowance, 2) Education of Service Children in Extra Command Areas and Isolated Detachments, and 3) Nursery Education for Service Children in Extra Command Areas and Isolated Detachments.

4.12.5.9 Coverage of commuting and housing expenditures

The UKMOD provides its military personnel with subsidized accommodation. We have also classified four themes of Allowances, Expenses, and Provisions as the coverage of commuting and expenditures. These are 1) Commuting, 2) UK service, 3) Relocation, and 4) Separation.

The accommodation that the UKMOD provides its military personnel with is of a high quality and close to their work-places so the personnel can be ready on short notice if needed. Military personnel are allocated Service Family Accommodation or Single Living Accommodation depending on rank and family size. The Single Living Accommodation is usually within walking distance of an individual's working unit, while the Service Family Accommodation is usually within a ten-mile radius. Single living accommodations are considerably cheaper than all other accommodations, and the Service Family Accommodation is heavily subsidized.

Within the theme of Commuting, the UKMOD provides two Allowances: 1) Home to Duty Travel and 2) Get You Home (Travel). The former is for those who commute daily and the latter for those who commute weekly. Both help ease the costs of commuting.

The theme of UK service consists of three Allowances: 1) Northern Ireland Resident's Supplement, 2) Northern Ireland Motor Insurance Refunds, and 3) Recruitment and Retention Allowance (London). The total cost of (1) and (3) in FY2019/20 was 10.5 million euro (9.3 million GBP) and constituted 2 percent of the Allowances budget.

The theme of Separation consists of two Allowances: 1) Longer Separation Allowance and 2) School Children's Visits. Longer Separation Allowance compensates those personnel experiencing separation over and above that compensated for by the X-Factor element within Basic Pay. As a general principle, it is paid at increasing amounts in order to target those who experience the most separation throughout their service. The total cost of Longer Separation Allowance in FY2019/20 was 113 million euro (100.4 million GBP) and constituted 21.1 percent of the total Allowances budget. Also, School Children's Visits contribute toward the cost of reuniting the children of military personnel with their parents at their duty station during certain

⁷⁵ Ministry of Defence, Tri-Service Regulations for Expenses and Allowances, version Oct. 2021.

school holidays. It is a principal condition that there will be a parental contribution made toward all School Children's Visits.

The Relocation theme within the Allowances, Expenses, and Provisions consists of three Allowances: 1) Disturbance Expense, 2) Insurance Allowance, and 3) Refund of Legal Expenses. The total cost of (1) and (3) in FY19/20 was 21.9 million euro (19.5 million GBP) and the schemes constituted 4.1 percent of the total Allowances budget.

4.12.5.10 Provision of civilian education

The UKMOD lists the following top three civilian education schemes:

- 1) Armed Forces Apprenticeship Program. It was estimated in March 2021 that around 20,000 other ranks were undertaking this program.
- 2) Armed Forces Command and Staff Training. This typically results in Master level qualification.
- 3) A mix of targeted and elective Degree/Masters/National Level 6 schemes that the UKMOD offers. The last estimate, in March 2020, was about 4,500 across the three services, including those mentioned in point 2.

The UKMOD has an Enhanced Learning Credits scheme that allows military personnel up to three opportunities to receive support towards elective qualifications. This requires individuals to contribute at least 20 percent of the course cost, with a maximum of 2,250 euro (2 000 GBP) per application and one application per year.

We have classified the Allowances, Expenses, and Provisions theme of Service Personnel's Education within this compensation category. There are five Allowances in this theme. Not all of them are directed at providing military employees with civilian education, but several seems to fit this compensation category: 1) Individual Resettlement Training Costs Grant, 2) Learning Credit Schemes, 3) Provision of Driving Licence Fees, 4) Part Time Service Instructor's Allowance, and 5) Language Awards.

The Individual Resettlement Training Costs Grant seems particularly fitting for this compensation category. The objective is to assist those who leave the BAF in resetting in a new career. The Learning Credit Schemes are also fitting. Their objective is to provide an educational initiative to encourage full-time employees to pursue personal development. The cost of (1), (4), and (5) was in FY19/20, 3.6 million euro (3.2 million GBP) and constituted 0.7 percent of the Allowances budget.

5 Summary and the way forward

This report sheds light on the monetary incentive systems used in the armed forces in advanced economies. The primary objective is to understand how these countries structure their compensation and personnel policies to meet the challenges of recruitment, retention, effort, and performance, as well as the separation of personnel. The background for this objective is an interest in the Norwegian defense sector in improving the monetary incentive system that is in place in the Norwegian Armed Forces (NAF). An analysis of how ministries of defense (MODs) and armed forces, as well as self-defense forces, in advanced countries structure their compensation and personnel policies, should interest both policymakers, academics, and other stakeholders in the defense and security establishments around the world.

We wish to stress that the monetary incentive system in place in the armed forces is rather complex and difficult to assess at the level of abstraction done in this report. We know a great deal about the Norwegian system, and we have attempted to write correctly about all the other eleven systems. Any errors are, of course, our responsibility, but we acknowledge that there may be misunderstandings in the report. To improve the accuracy of the report, all countries received a draft of their respective country analysis and Chapter 3 for consideration. Five countries provided feedback on the drafts. We thank Denmark, Germany, Finland, Italy, and Japan for this additional effort. Finally, not to miss an opportunity to praise best practices, we want to compliment the Australian Department of Defence (ADOD) and the Australian Defence Forces (ADF) for having, by far, the most transparent and well-described monetary incentive system in place online.

In the design of the survey, we had to trade off the gains that would have been made by using many complicated questions for the gains made by receiving replies from many (or any) MODs. We acknowledge that the need for information for an in-depth analysis of each country's monetary incentive system is much higher than what we could expect from a single survey completed by each country's MOD. Instead of viewing this report as the end of the road, we see it as the dawn of comparative studies of the structure of monetary incentives in military organizations in advanced countries.

We have several suggestions about how to expand and deepen our knowledge and understanding of monetary incentive systems in NATO and NATO partner countries. First, there are several important countries that either were not able to complete the survey or were not asked, because of the reach of the NMOD network. The report does not include North America and, thus, the United States and Canada. There are several European countries missing as well, including France. In the Asia-Pacific region, the inclusion of South Korea and New Zealand would have improved the sample. More countries is an obvious and potentially fruitful expansion of the study.

We believe that a comparative analysis would benefit if country experts provided insights and knowledge about their own countries' monetary incentive systems. Our second suggestion is that each country's ministries of defense and other defense institutions could collaborate by sharing information about the incentives, discussing the pros and cons of their own systems and

elaborating on reforms and effects on recruitment, retention, inducing efforts, and the performance and separation of personnel. Our third suggestion is to gather academic experts (e.g., economists working on personnel and labor economics and related subfields) from each country, organize workshops, and collaborate on understanding the monetary incentive systems in place in the armed forces in advanced countries. There is likely historical or ongoing research on incentives in the armed forces in each country that would benefit all countries. One way to proceed is to establish a NATO-driven research collaboration with the objective of reviewing existing national research and improving cross-national knowledge of how the monetary incentive systems work and how to improve the systems.

Abbreviations

ADF	Australian Defence Force
ADFA	Australian Defence Force Academy
ADOD	Australian Ministry of Defense (Should be DoD)
ASDF	Japanese Air Self Defense Forces
ASIO	Australian Security Intelligence Organisation
AUD	Australian dollar
AVZ	Zero tax on the foreign assignment supplement (Bundeswehr incentive),
BAF	British Armed Forces
BFD	Vocational support system (Bundeswehr incentive)
DAF	Danish Armed Forces
DBRP	Defined Benefit Retirement Pension (Sweden)
DFRDB	Defence Force Retirement and Death Benefits (ADF incentive)
DHOAS	Defence Home Ownership Assistance Scheme (ADF incentive)
DKK	Danish kroner
DMD	Dutch Ministry of Defence
DMDPA	Danish Ministry of Defence Personnel Agency
DMOD	Danish Ministry of Defense
EMAD	Spanish Ministry of Defense
EOD	Explosive Ordnance Disposal (UK personnel group)
FBG	Finnish Border Guard
FDF	Finnish Defence Forces
FI	Financial incentives (UK incentive)

FFI	Norwegian Defence Research Establishment
FMOD	Finnish Ministry of Defence
FMOFA	Finnish Ministry of Foreign Affairs
FRI	Financial retention incentives (UK incentive)
GBP	British Pound sterling
GMOD	German Ministry of Defense
GPS	General Pension System (Sweden)
GSDF	Japanese Ground Self Defense Forces
HR	Human resources
IAF	Italian Armed Forces
IMOD	Italian Ministry of Defence
ISAF	International Security Assistance Force
JCG	Japan Coast Guard
JMOD	Japanese Ministry of Defence
JPY	Japanese Yen
JSDF	Japanese Self Defense Forces
KFOR	NATO's Kosovo Force
MILCOM	Complementary military personnel (SPAF personnel group)
MNDP	Ministry of National Defense of Poland
MSBS	Military Superannuation and Benefits Scheme (AFD incentive)
MSDF	Japanese Maritime Self Defense Forces
MTM	Temporary military personnel (SPAF personnel group)
NATO	North Atlantic Treaty Organization

NAF	Norwegian Armed Forces
NDS	Norwegian Defence Staff
NLAF	Netherlands Armed Forces
NOK	Norwegian kroner
OECD	Organization for Economic Co-operation and Development
PAF	Polish Armed Forces
PBG	Polish Border Guard
PLN	National Currency of Poland – złoty
RB	Reserve band (UK incentive)
RFI	Request for information
RRP	Recruitment and Retention Payment (BAF incentive)
SEK	Swedish kroner
SF	Special Forces (UK personnel group)
SPAF	Spanish Armed Forces
SWAF	Swedish Armed Forces
SWMOD	Swedish Ministry of Defence
TOD	Guard Services: Compensation for Irregular Shifts During Weekdays (NLAF incentive)
UKMOD	United Kingdom Ministry of Defence
WESM	Weapon Engineer Officers (Submariner) (UK incentive)

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About FFI

The Norwegian Defence Research Establishment (FFI) was founded 11th of April 1946. It is organised as an administrative agency subordinate to the Ministry of Defence.

FFI's mission

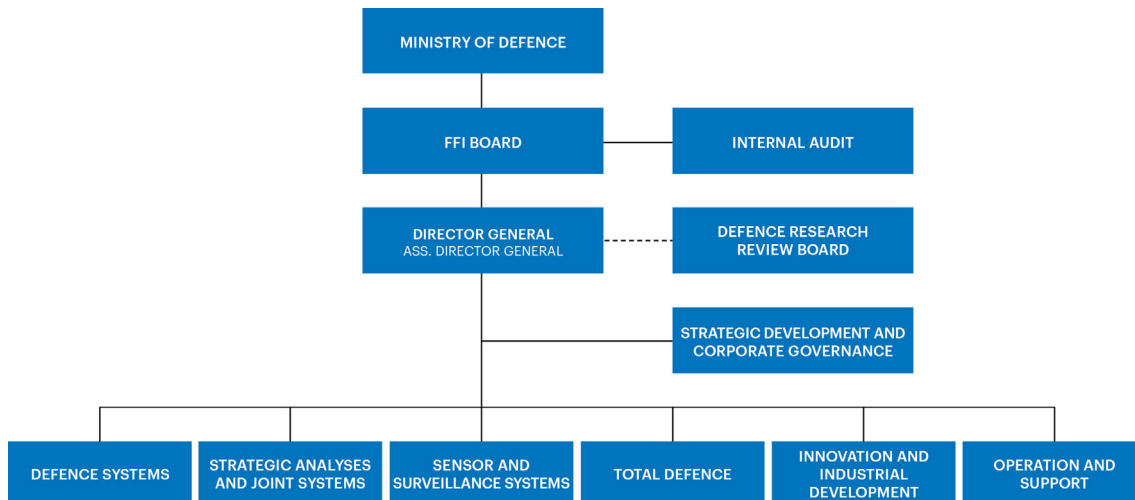
FFI is the prime institution responsible for defence related research in Norway. Its principal mission is to carry out research and development to meet the requirements of the Armed Forces. FFI has the role of chief adviser to the political and military leadership. In particular, the institute shall focus on aspects of the development in science and technology that can influence our security policy or defence planning.

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Creative, daring, broad-minded and responsible.



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