Discovering the Archaeologists of the Netherlands 2012-14

van Londen, H.; Vossen, N.; Schlaman, M.; Scharringhausen, K.

Publication date
2014
Document Version
Final published version

DISCO

Discovering the Archaeologists of Europe

Discovering the Archaeologists of the Netherlands 2012-14

Heleen van Londen, Nathalie Vossen, Marjo Schlaman and Karin Scharringhausen

Published by the University of Amsterdam

Universiteit van Amsterdam

Lifelong Learning Programme

NVvA
Nederlandse Vereniging van Archeologen

Rijksdienst voor het Cultureel Erfgoed
Ministerie van Onderwijs, Cultuur en Wetenschap


Y·O·R·K
ARCHAEOLOGICAL
T·R·U·S·T

LANDWARD
RESEARCH LTD

universitätbonn

onroerend
erf
goed


CSIC
incipit
Instituto de
Ciencias del
Patrimonio

UAM

UNIVERSITAS COMENIANA BRATISLAVENSIS
MCMXIX

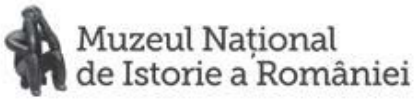

IAI
Institute of
Archaeologists
of Ireland

Italiana
cia
archeologi
Confederazione

CH
WB
Cultural
Heritage without Borders
KULTURARV UTAN GRÄNSER

E
A
A
European Association
of Archaeologists

Πρωτοβουλία
για την ανάδειξη
της πολιτιστικής
κληρονομιάς
Initiative for
Heritage
Conservancy


Muzeul Național
de Istorie a României


UNIVERZA NA PRIMORSKEM
UNIVERSITÀ DEL LITORALE

UNIVERSITEIT VAN AMSTERDAM

apa
ASSOCIAÇÃO PROFISSIONAL DE ARQUEÓLOGOS

Arheopolis

LATVIJAS
UNIVERSITĀTE
ANNO 1919
UNIVERSITY OF LATVIA

Faculty of
History and Philosophy

FORSKER
FORBUNDET

ISBN 978-90-9028554-2

This project acted as the Dutch component of the transnational *Discovering the Archaeologists of Europe 2012-14* project, which was administered by York Archaeological Trust with financial support from the Lifelong Learning Programme of the European Commission. This report reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Contents

Tables

Figures

Preface

Presented here is the labour market survey of the Dutch archaeological sector for 2012 and 2013. The survey is part of the European project *Discovering the Archaeologists of Europe 2014*, coordinated by York Archaeological Trust (YAT) and financed by the Leonardo da Vinci programme for Life Long Learning. Over twenty member states are represented in the overall study. The trans national report at the European level is expected to appear in September 2014.

At the beginning of the European project The Netherlands were not participating, but could enter at a later stage bringing in national funds. We would like to thank York Archaeological Trust for making Dutch participation possible. National funding was realised by the support of the Cultural Heritage Agency of The Netherlands, the University of Amsterdam (UvA) and the Dutch Archaeological Association (Nederlandse Vereniging van Archeologen, NVvA). The Dutch partners worked with a separate project plan stating aspects such as roles, responsibilities and tasks. The University of Amsterdam acted as project leader and represented the Netherlands in the European project.

This report consists of two parts. The first part follows the European structure and is mostly descriptive in character. Results from this part will be used for the trans national report and is therefore translated into English. The second part contextualizes the results for the Dutch situation.

Results from this survey will be used in the Heritage Monitor maintained by the Cultural Heritage Agency of The Netherlands. Previous work to profile the archaeological sector show differences as well as similarities to the present research. Therefore, the Cultural Heritage Agency of The Netherlands will in future periodically organize surveys in close cooperation with the sector, using the present research as a basis. The Netherlands hope to participate in future initiative of *Discovering the Archaeologists of Europe*.

We would like to thank everyone who took the time to fill in the questionnaires and made this survey possible. Many thanks go to Esther Vriens from Vriens Archeo BV, who made data available on vacancies in archaeology. Also, we would like to express our appreciation to Monique van Dries (Leiden University), Taco Hermans and Maartje de Boer (the Cultural Heritage Agency) who advised us during the project and were so kind to comment on the draft report. All content of this report however, is for the responsibility of the authors.

Summary

Introduction
Discovering The Archaeologists of Europe 2014 is part of the Leonardo da Vinci 'Lifelong Learning Programme' funded by the European Commission. The report presented here is the second survey in a five year sequence of comparative research of the archaeological labour market and training in Europe.
The study focuses on the paid workforce in the archaeology sector and therefore does not go into unemployment. Also, business economics like turnover and profit fall outside the scope of this study.

The objectives for this study are formulated within the European project.

- calculating workforce size in archaeology;
- profiling the profession in regards to diversity;
- insight in the situation and trends in the archaeological labour market, including investment in training, recruitment and career possibilities;
- insight in training demands and - shortages;
- insight in the range of employers in archaeology;
- information for employers to further their businesses;
- information for individuals to further their careers;
- information for organizers of vocational training regarding training demands.

Of the 259 sent questionnaires 114 were returned, resulting in a response rate of 44% and a (more or less) fair distribution between sub sectors.

Calculating the (paid) workforce size in the Dutch archaeology sector
For 2013, it is estimated that 1271 people had a paying job in Dutch archaeology. After a 5% correction to compensate people that could have been overlooked in the mailing list, the number reaches 1335 people. A substantial part of the workforce (c. 38%) is found in commercial companies or among the self-employed.
The historical trend shows a twenty year period of steep growth (1988-2008) and stagnates between 2008 and 2013. The numbers in the trend are based on diverse methods and must be seen as indicative rather than absolute.

Organisations (only respondents)
The sector is dominated by small sized organisations (2-6 persons) and self-employed people. Only two large organisations (50-99 employees) are represented. The size of the large and middle sized organizations decrease between 2008 and 2013. The number of small sized organizations increased. Relatively a large number of volunteers work in archaeology, mostly with government institutes.
Based on the respondents information the total number of employees increases between 2008 and 2012, but decreases in 2013 (c. 3%). In relation to 2008 the result is still growth. The number of people working for the government is more or less consistent over the years. In semi-government institutions more people were employed since 2008. The decrease of employees is found in commercial archaeology, especially those doing excavations (8,8%),

but only after 2012. Full-time equivalents decreased less however, meaning less part-time work. From 2008 onwards more self-employed people have entered the market as well as companies of specialists. The first group does not have a full portfolio between 2012 and 2013 and represent hidden unemployment. The impact of the crisis becomes apparent only after 2012.
Only 7% of all organizations (commercial and non-commercial) have a quality system such as ISO 9001 that is of influence on staff competences and staff size.

Solvability (data from the chamber of commerce)
A sample of private companies (10 out of 45) founded between 1995 and 2008, ranging in size - excluding the self-employed - was taken to assess solvability. The solvability ratio indicates whether companies can comply with their financial obligations. In 2012, three out of ten have a ratio above the norm (0.5), two just below it. Five companies are on or below the minimum (0.25-0.4). The results indicate that equity is under pressure, but not in all cases, pointing to a difference in management strategies. Apart from the organizations represented in the sample, two companies have gone bankrupt between 2011 and 2013.

Vacancies (data supplied by Vriens Archeo BV)
Based on data collected between 2008 and 2013 a decline (49%) of the number of job vacancies can be seen between 2012 and 2013, resulting in a "frozen" market with little job mobility.

Business confidence
Managers of organizations
are not all together pessimistic about the near future. Expectations of increase as well as decrease co-exist. Regarding future activities (2014-2016), managers expect to broaden their activities towards specialist work, training and public engagement.

Age, gender balance, disability status and countries of origin
The average age for people working in archaeology is 46.1 for men and 42.1 for women. There are more men (58%) than women (42%) in the workforce. When age and gender are combined, men are best presented in the older generations, while women make up the majority among the younger people (30-39). The turning point is age 40.
Out of 519 workers - as presented by the response group - only 26 people have a disability status (5%)
Of these people 24 work for government (92%), especially city councils. Almost the entire workforce originated in The Netherlands (92.3%). Belgium is the best represented foreign country.

Geographical distribution
Commercial companies are predominantly active in the Netherlands. Most contracts are found in the provinces of Gelderland, Noord-Brabant and Zuid-Holland, 28% of the employees are working in Gelderland. The government has the largest concentration of employees dealing with archaeology in the provinces Noord- and Zuid-Holland and Noord-Brabant.

Job profiles and number of workers per profile
Regarding the job profiles in the Quality Standard for Dutch Archaeology, 17 job profiles were defined in the questionnaire. The number of senior archaeologists is high, they make up 26% of the population. Many of them work for the government. At the State level junior functions have workers with many years of service. Especially in government and university people tend to stay many years in service (12 to 20 years).

Salaries
Workers in the archaeological sector have a high level of education (85%), but earn just above the national average. Based on the response data, archaeologists earn an average income before taxes of €39,424 a year. The average income before taxes of the self-employed is €31,129. Out of 31 respondents, 8 said to earn less than €20,000 euro a year. Women have lower salaries than men, part-time as well as full-time. The difference is smaller in part-time jobs. Data give no insight in earnings per job. Women work more often part-time and in junior positions.

Level of education
The majority of the workforce has academic training (85%), 11% has a PhD.

Training shortages and demands
Of the managers of organisations that were asked to fill in the questionnaires, 38% said that knowledge and skills from university suit job requirements, while 24% opposed that statement.
In relation to 2008-9 they notice a shortage on knowledge and skills in policy. The shortage in methods and techniques has improved since 2008-9. There is a demand for project management, legal knowledge, planning and business management.

Employers' commitment to qualifications and training
Organizations have budgets for training. Over the years the budget is higher than the realisation, meaning employers do not use the funds for training entirely. Budgets decrease after 2008. In 2013 the total budget of the response group van 12,000 Euro. Divided by 519 workers, this amounts to 23 Euro per person.

1 Introduction and background

1.1 Introduction

Discovering The Archaeologists of Europe 2014 is part of the Leonardo da Vinci 'Lifelong Learning Programme' funded by the European Commission. The report presented here is the second survey in a five year series of comparative research of the archaeological labour market and training in Europe.
The surveys of 2006-2008[1] and 2012-2013 offer datasets to analyse social, economic and education trends in the archaeological sector.

The *Rijksdienst voor het Cultureel Erfgoed* (RCE, Cultural Heritage Agency), the *Universiteit van Amsterdam* (UvA, University of Amsterdam) and the (*Nederlandse Vereniging van Archeologen* (NVvA, Dutch Association of Archaeologists) cooperated in this project.

1.2 Context and background

Data has been collected from the archaeological sector in the broadest sense (government, commercial companies, the self-employed, musea etc.) giving insight in the organizations, training and labour market. When possible information has been used from previous studies to generate trends. The results of this study will be integrated in the Heritage Monitor maintained by the *Rijksdienst voor het Cultureel Erfgoed*.[2]

Below, some will be said on the project itself, the aims, the Dutch system, the economic crisis and the structure of the report. This chapter will conclude with an overview of previous surveys in order to present an historic trend in workforce size.

1.2.1 Background

The first survey on the archaeology labour market and training within the framework of Discovering The Archaeologists of Europe 2006-2008 comprised of 12 European countries.[3] Focus was put on mobility - and notably the barriers - between European countries in light of the implementation of the Bachelor and Master system (BaMa) in higher education, as well as career opportunities, workforce size, training demand and strategic information for business management in archaeology.

Now, in sequence to this, 22 European countries participate in the survey of 2013. This time, focus will be on the effect of the economic crisis on archaeology concerning jobs and

[1] Waugh 2008
[2] http://cultureelerfgoed.nl/publicaties/erfgoedmonitor
[3] For the Dutch report see Waugh 2008

investments in training. Many of the member states have integrated Archaeological Heritage Management into planning and construction because of the Valletta Treaty. It is expected to see a direct impact of the economic crisis on the archaeological sector, such as job loss and loss of knowledge and skills, but also innovation and training demands.

1.2.2 Aims and objectives

The aim of this survey is to map the archaeological workforce for 2012-2013. It encompasses people with a training in archaeology, but also other training. The workforce has been defined broadly as paid workers in the archaeological sector, counting also support staff.
This study does not go into unemployment. Also, business economics like turnover and profit are not within the scope of this study.

The objectives for this study are formulated within the European project:

- calculating workforce size in archaeology;
- profiling the profession in regards to diversity;
- insight in the situation and trends in the archaeological labour market, including investment in training, recruitment and career possibilities;
- insight in training demands and - shortages;
- insight in the range of employers in archaeology;
- information for employers to further their businesses;
- information for individuals to further their careers;
- information for organizers of vocational training regarding training demands.

1.2.3 Context

With the implementation of the *Wet op de Archeologische Monumentenzorg* (WAMz, Archaeological Heritage Management Act in 2007), the Valletta Treaty (1992) was formally ratified in the Netherlands. Already in 2003 by way of an interim policy act, the government allowed commercial companies to enter the sector. Many commercial companies therefore have a founding date from 2003 or 2004 onwards. Because of the Act of 2007 contractors can be obliged to fund research or other measurements if they form a threat to important archaeological heritage. Government bodies, mainly city councils, determine the conditions through planning. They have been given great liberty in the manner in which they will perform their archaeological heritage management. City councils get to select sites as well as research content - and as a consequence costs. However, municipalities are themselves obliged to incorporate sites and monuments into zoning plans for in situ preservation. The law further states that all activities related to actual digging are brought under permit. Companies and organizations (also government) can get a permit if they are able to show that they will comply to the *Kwaliteitsnorm Nederlandse Archeologie* (KNA, Dutch Archaeological Quality Standard) and have (enough) skilled employees with knowledge of certain time periods and regions. Companies and organizations get a one time review on capacity, knowledge and skills when applying for the permit. An inspectorate has been introduced at first to watch over companies, solely for their activities under the permit.

Now, the inspectorate monitors the system. The system for quality management has been partially implemented, because the professional register failed to arise as did the system to certify companies. Instead the permit was put in place. The Dutch Archaeological Quality Standard secures the level of education and skills of actors by means of reserved procedures. The blue print of system consists of a triangle between contractors, government and archaeological companies, in which government determines, maintains and controls, the contractor pays and the archaeological company conducts the work.[4]

Before the introduction of the market and the 'polluter-pays principle', that is prior to 2003-2007, the sector consisted mostly of government financed organizations doing research, education and policy (heritage management). Some commercial companies already existed as they focused on non-digging activities. Only certain government organizations had a permit to perform excavations, such as the *Rijksdienst voor het Oudheidkundig Bodemonderzoek* (State Service of Archaeological Investigations, now Cultural Heritage Agency), the *Rijksmuseum voor Oudheden* (RMO, National Museum of Antiquities), universities with an archaeology department and large municipalities like Amsterdam, Rotterdam, Utrecht and Den Haag. These organizations stayed active during the systems change and many archaeologists saw these changes from within familiar structures and are still in place today. During this time universities dealt with budget cuts as a result of education policies and the workforce decreased.

The Act of 2007 resulted in new organizations, employers and jobs in the public sector (municipalities and provinces) as well as the private sector. This impulse coincided with a building boom, a double fly wheel. Table 1 shows a steep growth in the number of people working in archaeology until 2008. This steep growth is matched by the number of research reports (Dutch: *Archismeldingen*) that were registered, mostly field surveys and assessments.[5]
A number of graduate cohorts entered the labour market as there was plenty mobility. The workforce gained many young professionals. Because of the reserved procedures in the Dutch Archaeological Quality Standard a demand arose for acknowledged senior archaeologists. At the same time an uneven playing field emerged in the market as a result of the combination of an imperfect quality system, policy liberty and a thin inspectorate. When the economic crisis hit and commissions decreased, archaeological companies competed fiercely on price with a downward price spiral as a consequence.[6] Towards 2013 some companies went bankrupt and job vacancies disappeared. The job market was frozen for new people wanting to enter the sector, companies needed to cut budgets and let people go.

When the Act of 2007 was launched, it has been stated that the law would be evaluated. The evaluation took place in 2011 and has led to several measurements by the State government to repair and improve some weaknesses in the system. These pertain to

[4] http://archeologieinnederland.nl/ and Waugh 2008
[5] source: Erfgoedmonitor, http://www.erfgoedmonitor.nl/
[6] Final report of the *Centraal College van Deskundigen Archeologie* on a complete quality system in archaeological heritage management, *Programmabureau SIKB* (2013). http://www.sikb.nl/CCvDArcheologie

aspects of quality management, policy liberty, knowledge and skills, increase of knowledge, gradual degradation and maritime archaeology.[7]
These measurements are being prepared and is expected to have an effect on the labour market.

1.2.4 Crisis

What started out as a (worldwide) financial crisis of banks in 2007-2008, soon became also a building crisis in the Netherlands. Due to the continuation of the economic crisis followed by a chain reaction of rising unemployment, low consumer confidence, bad available of mortgages among other things, the housing industry sank. This report will look in more detail at the effect of this economic crisis on employment in archaeology.

1.2.5 Structure of the report

The report consists of five chapters including explanation of methods (2), information on the level of organizations (3), individual workers (4), jobs (5) and training (6). The format is inherited from the UK report that serves as a guideline for the comparison between countries.[8] Not only the chapter format is adopted, but also the tables are similar to facilitate the overall European analysis.

1.3 Previous work

This section provides an overview of previously conducted research to determine the long-term trend of the number of persons working in archaeology. Most reports were only moderately suited for this purpose, because of different uses of definitions and lack of substantiation of choices that led to the numbers. In addition, the unit often varies in people or FTEs. Historical figures are selected from studies that are treated below and related to the results from this research (Table 1).

The trend in the table below should be seen in light of the various approaches as bandwidth of the number of people employed in the archaeology, both in individuals and in FTEs. The table shows a steep growth in the period 1988-2008, almost a threefold increase in twenty years. The years between 2008 and 2013 show stagnant growth.

[7] http://www.cultureelerfgoed.nl/dossiers/verbeteracties-archeologie/achtergrond-evaluatie-archeologiewet
[8] Aitchison & Rocks-Macqueen, 2013

year	individuals	FTE	source
1988		360	Louwe Kooijmans 1988
1998		675	Louwe Kooijmans 1988
2002		900-950	Louwe Kooijmans 1988; ROB 2002
2003		825	Erfgoedbalans 2009
2007		935	Erfgoedbalans 2009
2007-2008	1161	932	Waugh 2008, 32
2007-2008	1311	947,7	this publication
2012-2013	1271	1008,2	this publication

Table 1. Estimate of the number of persons/FTE working in archaeology. For the period 2007-2008 two sources exist (Waugh 2008 and data from this publication). The figures of the two studies do not outrun each other much.

1.3.1 Archeologiebalans (ROB, 2002)

The implementation of the Valletta Treaty in Dutch legislation marked a profound change in the archaeological system. To assess the effects of the new State policy for archaeological heritage management a baseline survey has been conducted of the situation in the Netherlands in 2002. The report, the *Archeologiebalans*, shows facts and trends based on (already available) quantitative data. For an estimate of the number of archaeologists employed by municipalities, provinces and the State (including universities) in the 1980's unpublished data from L.P. Louwe Kooijmans from 1988 were used.

In 1982, about 150 professional archaeologists active in the Netherlands were spread over four public services, six university institutes, 19 provincial authorities and museums, 15 municipal services and museums and a small number of other museums and foundations. In 2002, more than 70 organizations were active in Dutch archaeology. The number of full-time jobs increased from c. 360 in 1988, via c. 675 in 1998, to c. 900-950 in 2002. The growth in capacity is evident both in municipalities, provinces and the State, but especially among the commercial parties. The universities remain slightly behind.

1.3.2 Discovering the Archaeologists of Europe 2006-2008 (Waugh, 2008)

The transnational project Discovering the Archaeologists of Europe carried out between 2007 and 2008 aimed to collect comparable information about the archaeological profession in 12 European countries.[9] The European project proposal was set up in line with some recent and successful national inventories, including those in Ireland, but in particular those in the United Kingdom. The two consecutive surveys been carried out respectively in 1997-1998 and in 2002-2003, provided the opportunity to detect econometric trends within the archaeological labour market.[10]

[9] Waugh 2008
[10] For an overview see Aitchison & Rocks-Macqueen, 2013

Based on the full scope of archaeological organizations in the Netherlands (n=209), the report provides an estimate of 761 working archaeologists. Including support staff the number is raised to 1161 (932 FTEs).[11] The total number of archaeologists specified by the 62 organizations (response group) in this enumeration is 499.[12] They represent 66% of the estimated entire profession. These 499 individuals match 399,93 FTEs.[13]

1.3.3 Erfgoedbalans (RACM, 2009)

The *Erfgoedbalans* 2009 reports on the state of the cultural heritage in the Netherlands describing archaeology, historical monuments and cultural landscape based on facts, figures, reflections on heritage and policy developments.[14]

The employment growth captured in this report is especially related to commercial archaeology, municipalities and provinces. A small decrease is visible at the state level as a result of privatizing the unit for field archaeology and processes of decentralization. The slight rise at the state level in 2002 is caused by the creation of the Heritage inspectorate. The growth at the provincial level is explained by the establishment of so-called 'heritage houses'. Since 2000, more municipalities have an excavation permit and/or an official archaeology policy. Small municipalities are seen to join in regional cooperation and appoint shared archaeologists for the region. The downward trend at universities is stalled.

1.3.4 Monitor 2009-2010 (Heritage Inspectorate, 2010)

The supervision of the Inspectorate for archaeology extends to national monuments, archaeological excavations and finds.

The monitor of 2009 was aimed at all municipalities (441) in the Netherlands. The commercial companies with an excavation permit were excluded because they recently delivered information to the State by applying for the permit. One third of the municipalities (35%) indicates sufficient capacity for the municipal tasks in the field of archaeology. Two-thirds of the municipalities (65%) said that they have insufficient staff to do this.
The figures from this monitor refer only to municipalities.

1.3.5 Industry research (NVAO, 2010)

The *Nederlandse Vereniging van Archeologische Opgravingsbedrijven* (NVAO, Dutch Association of Archaeological Excavationcompanies) commissioned research into key figures of the archaeological commercial sector (turnover, operating profit, employee size, number of investigations). The survey is performed in 2010 and covered the years 2000 to 2009.[15]

[11] Waugh 2008, table 1 and 17
[12] Waugh 2008, table 14
[13] Waugh 2008, table 16
[14] Erfgoedbalans 2009, http://erfgoedmonitor.acc.yrsrc.nl/publicaties/erfgoedbalans-2009
[15] http://www.opgravingsbedrijven.nl/branche-onderzoek/

The figures from both industry investigations refer only to the affiliated members at the NVAO (excavation companies).

1.3.6 Room for Archaeology (RIGO, 2011)

The Archaeological Heritage Management Act existed four years in 2011. When the law was adopted, it was decided to evaluate after four years whether the Act and associated measurements offers an effective and efficient contribution to a better protection of archaeology. The evaluation report shows indeed that on the basis of current legislation a better protection of archaeological heritage is possible. The evaluation is a snapshot of the administrative and social development of the archaeology legislation.[16]

In the report, the underpinning of the size of the commercial labour market is unclear (more than 1000 people or FTEs?). This number causes an anomaly in the trend line and does not match the other measurements. It concerns a possible overestimation. Because of the lack of any substantiation, as well as the deviation compared to other research is this number is not used.

1.3.7 Monitor 2011-2012 (Heritage Inspectorate, 2012)

The supervision of the Inspectorate for archaeology extends to national monuments, archaeological excavations and finds.

45% of the municipalities find that they do not have sufficient staff for their tasks, while 41% believe that they have sufficient staff available. Compared to the monitor of 2009-2010 the satisfaction increased. The extent to which policies are active depends on the available FTEs. In particular municipalities with more than 0.5 FTE for archaeology are distinguished in a positive way. This also applies to the quality control of the archaeological work conducted by third parties and approving and drawing up requirements for archaeological research. Municipalities with up to 0.2 FTE in general are less active. The majority of the municipalities have up to 0.2 FTE available for archaeology. Only 16% has more than 0.5 FTE.

The figures from this monitor refer only to municipalities.

1.3.8 Annual report (Heritage Inspectorate, 2012)

In 2012, the first sounds reached the Heritage Inspectorate that business became severe. In the annual report these problems are not clearly confirmed by the numbers of projects implemented in 2012 compared to previous years. It says that the number of short-term projects in 2012 increased, while the number of long-term projects is halved.

[16] Keers 2011

The annual report gives no insight into the number of people or FTEs employed in archaeology.

1.3.9 Industry research (NVAO, 2012)

In addition to the industry examination of the NVAO in 2010, a second survey was conducted in 2012. This survey provides an addition to the earlier figures until 2011. Some of the effects of the crisis will be made transparent.[17]

The data of this research were not yet available at the time this report was written.

1.3.10 Post-Malta developments in the Dutch archaeological profession (Universiteit Leiden, 2012)

In this article, the changes in Dutch archaeology are described as a result of the Malta legislation, for the archaeological community, the profession as well as individual archaeologists.[18] By means of a questionnaire, 195 organizations that were active in the Dutch archaeology were approached by email in 2009. With only 15 comments, the response was 7% and no representative result could be given. Therefore, in 2011 a questionnaire was sent again and organizations were approached by telephone. The results from 2009 and 2011 have been combined leading to data obtained from 62 organizations (32%).

The organizations that have filled in the questionnaire (62) together employ 962 people, of which 326 are archaeologists. Only a third of the employees has a degree in archaeology which means that the sector also employs many non-archaeologists. Almost half of the jobs (48%) is provided by the commercial sector.

1.3.11 Heritage monitor (RCE, 2014)

The Heritage monitor presents facts and figures of heritage in the Netherlands. These figures provide insight into the state of the heritage, the workings of the system and the effects of the heritage (Heritage) policy. This is done by fixed indicators that are measured periodically and made available through the website www.erfgoedmonitor.nl. Although the Heritage monitor is a policy instrument, the data are accessible and free to use for and by everyone.

The Heritage monitor is still under development and will be further expanded in 2014/2015. The first data are already available and additions will be published through time. The Heritage monitor is still under development and will be further expanded in 2014. The data of this survey will be added to the Heritage monitor.

---

[17] http://www.opgravingsbedrijven.nl/branche-onderzoek/
[18] Van den Dries and Kwast, in press

2 Methodology

2.1 Introduction

This chapter describes how data for this research were collected, interpreted and processed, and lists the other sources that were used. In addition an estimate is calculated of the size of the workforce. The basis for this calculation differs from the other analyses, because here, in addition to the information from the response group, the workforce not represented by the questionnaire (non-response) is calculated as well.

2.2 Project team

This project is a collaboration of the *Rijksdienst voor het Cultureel Erfgoed* (RCE, Cultural Heritage Agency), the *Universiteit van Amsterdam* (UvA, University of Amsterdam) and the *Nederlandse Vereniging van Archeologen* (NVvA, Dutch Association of Archaeologists).

Heleen van Londen (Assistant Professor, UvA) acts as project manager and together with Nathalie Vossen (Chair of the NVvA), Marjo Schlaman (research master student VU) and Karin Scharringhausen (research master student UvA) form the project team. Maartje de Boer (programme manager Heritage monitor) and Taco Hermans (project manager Archaeology Monitor) from the RCE participated and guided the project so that the data can also be used for the Heritage monitor.

2.3 Questionnaire and other information

A questionnaire is used for this survey (see Annex 2). The data are supplemented by other sources whenever necessary. When applied, it is disclosed in the text.

2.3.1 Questionnaire

At the projects kick-off meeting (York, September 2012), the "Core Data" were discussed and approved by all European partners (Annex 1). These data are collected by questionnaires by all participating countries and form the basis for the transnational comparison. In addition, each country is free to add to the list for the benefit of the national report. The Dutch questionnaire is included in the annex (Annex 2).

As part of the data will be used for the Heritage monitor, the Cultural Heritage Agency added a number of supplementary questions. These relate to the geographic spread of activities, the effects of the crisis on the number of archaeological investigations carried out and the quality of the performed archaeological research.

2.3.2 Other information

In addition to the questionnaire other sources are used such as the in- and outflow data of students (open data education DUO), the number of vacancies in the archaeological sector (Vriens Archeo BV), the monitor of the Heritage inspection, the RIGO-report, the NVAO-market research, figures from the Central Statistical Office, the Dutch National Report DISCO 09 (Waugh 2008) and company details via the Chamber of Commerce.

2.4 Mailing List

Various data files of addresses were collected for the mailing list:

- members list of the *Vakberaad* (provincial archaeologists)
- members list of the *Convent van Gemeentelijk Archeologen* (CGA, Municipal archaeologists)
- list of the *Steunpunten* (provincial offices)
- list of the *regionale uitvoeringsdiensten* (regional services)
- members list of the *Vereniging van Ondernemers in de Archeologie* (VOiA, Association of Entrepreneurs in Archaeology)
- list of members of the *Nederlandse Vereniging van Archeologische Opgravigsbedrijven* (NVAO, Asociation of Dutch Excavation Companies)
- University departments affiliated with *Archon*, the research school for Archaeology

In addition, for missing organizations and institutions (e.g. SIKB, PRO-rail) websites were visited to figure out the contact person and address. Of all organizations, institutions and companies the Executive Board were addressed as much as possible.

With regard to the municipalities, it was decided to write only to municipalities and partnerships that employ an archaeologist (fixed position or not). It would be difficult to find persons responsible for archaeology working in municipalities without an archaeologist or archaeological consultant. Furthermore, it was expected that the response of these municipalities would be very low.

Due to strong developments in the archaeological labour market at the time of research, a number of (especially) self-employed professionals were not included on the mailing list, for example because they had not been included on the list of members of the VOiA. The final mailing list contained 259 addresses by which an almost complete coverage of the sector is reached.

2.5 Data collection

Two questionnaires were made, one for organizations, institutions and companies and one for self-employed professionals (Annex 2).
Before the spread of the questionnaires, an explanatory mail was sent. Next, the questionnaire was distributed digitally in two tranches through the digital open survey

platform *Survey Monkey*. The respondents were given four weeks to complete the questionnaire. Just before the expiry of the end date a reminder was sent by email. Also, the ending date was extended once. In addition, during the national conference, the *Reuvensdagen* 2013, the opportunity was offered to fill in the questionnaire analogue. There was no use for this, but some new self-employed professionals has reported and several people have filled in the questionnaire digitally. After closing the questionnaire, a number of organizations, institutions and companies were approached separately to fill in the questionnaire or give additional information.

In the end, these actions yielded a response rate of 114 questionnaires (Table 4). In comparison with the previous Disco-project it means, almost doubling the number of respondents in absolute terms, but a percentage increase of 14% given the wider scope of mailing in the present investigation (Table 2).

year	total response	%
2008[19]	62	30%
2013[20]	114	44%

Table 2. Response rate Disco 2006-2008 and Disco 2012-2013

year	No. of persons (response group)	No. of persons for the entire sector (estimate)	%	FTEs (response group)	FTEs (estimate)	%
2008[21]	535	1311	41%	399.0	947.7	42%
2013	519	1271	41%	424.8	1008.2	42%

Table 3. Number of persons and FTEs working in archaeology resp. according to respondents and estimates (n=93). Calculations for 2008 have been extrapolated based on the ratio response/whole occupational group for 2013, i.e. 41% and 42%.

Table 3 shows the number of persons employed in archaeology based on response data, set against the total estimated number (see Table 5 for the estimate). The figures for 2008 are not derived from the previous Disco-report (Waugh 2008) because the underlying data were not available. The figures listed in the report therefore could not be assessed for comparability. The questionnaire of the current Disco-project has also yielded data for 2008. These are used and therefore show the same proportion in percentages, as the year 2013. The number of respondents to the question 'how many people are employed at your company/organization (reference date 1 January 2013)' is less than the total number of respondents (n= 93).

[19] Waugh 2008
[20] This reporting, data taken from Table 4
[21] Data from this report. No use was made of Waugh 2008

2.6 Data entry, analysis, presentation and archiving

The received data are statistically analysed, displayed in tables and commented on. Only Excel was used. The raw data from the questionnaires were checked for errors and corrected for 'doubles'. Some tables had to undergo a few 'steps' during analysis. In future research it is recommended to adjust the questionnaire from methodical point of view so that the data presented in the table are closer to the primary data, with a minimum of intermediate steps.

Where possible the percentages and figures in this report are rounded to the nearest whole number of 0.5 or higher. Percentages will round up to 100%, even if the accumulated figures are not the full 100%.

The data collected for this project are managed by Cultural Heritage Agency.

2.6.1 Response rate

Of the 259 questionnaires posted, 114 are returned. The following table shows the response per (sub)sector. In section 3.2 various sectors and (sub)sectors are explained.

2013					
sector		**No. of mailings**	**No. of responses**	**No. of non responses**	**response %**
Government		**94**	**49**	**45**	**52.1%**
	State	5	3	2	60.0%
	Provinces	20	8	12	40.0%
	Municipalities	60	36	24	60.0%
	Universities	9	2	7	22.2%
Semi-government		**54**	**19**	**35**	**35.2%**
Private companies		**111**	**46**	**65**	**41.4%**
	Companies	45	21	24	46.7%
	Self-employed	66	25	41	37.9%
total		**259**	**114**	**145**	**44.0%**

Table 4. Number of sent questionnaires and respondents per (sub)sector

In addition to a good response rate of 44% there is a balanced distribution between the (sub)sectors. Within the (sub)sectors even representation is not always looked at, for example no destinction was made between large and smaller municipalities. The exception are the commercial companies. Below, attention is paid to the confidence of the data.

2.6.2 Completeness of questionnaires

Despite the high response, not all questionnaires are duly completed. However, this has not led to loss of quality. Of the 114 respondents, 71 questionnaires are duly completed. Most of the 43 not fully completed questionnaires concerned minor matters such as skipping the last question ("what is the background of your expectation with regard to sales"). There is no incompleteness at a specific (sub)sector. The questions related to FTEs, numbers of persons and salary per function group were at times incomplete.

The number of respondents or answers given (n=) is given at the tables.

2.6.3 Calculating workforce size

One of the most important objectives of Discovering the Archaeologists of Europe is to generate an estimate of the number of persons employed in the Dutch archaeology. And because it involves an examination of the archaeological job market, it concerns people with paid work. All institutions, companies and individuals, both public and private, semi-government, engaged in activities from the archaeological field work were approached.

The questionnaires offer statistically a representative image of the archaeological profession. For the entire archaeological job market these figures need to be completed with an estimate of the workers that represent the non-response.

2013			**Response Data**			**Estimate (Non response)**		**Total**	
n=		**sector**	**persons**	**FTEs**	**Part-time factor**	**persons**	**FTEs**	**persons**	**FTEs**
40	O		**249**	**204**	**0.82**	**385**	**285.3**	**634**	**489.3**
2		State	65	59.5	0.92	6	5.5	71	65.0
4		Provinces	14	10.6	0.76	18	13.6	32	24.2
32		Municipalities	132	106.7	0.81	84	67.9	216	174.6
2		Universities	38	27.2	0.72	277	198.3	315	225.5
17	SO		**78**	**56.5**	**0.72**	**81**	**58.7**	**159**	**115.2**
36	P		**192**	**164.3**	**0.86**	**286**	**239.4**	**478**	**403.7**
15		Companies	171	153.6	0.90	241	216.5	412	370.1
21		Self employed	21	10.7	0.51	45	22.9	66	33.6
93	**total**		**519**	**424.8**	**0.82**	**752**	**583.4**	**1271**	**1008.2**
	correction 5%							**1335**	**1058.6**

Table 5. Number of persons employed in archaeology/FTEs, calculated and estimated (O=Government, SO=semi-government, P=private companies). The correction of 5% applies to those institutions that may have been missed in the mailing list of the questionnaire.

The number of persons employed were calculated from the response data, both individuals and FTE. In addition, for the organizations that haven't answered the questionnaire (non-

respondents), an estimate was made of the number of persons working there via the internet, telephone or information of the Chamber of Commerce. For the respondents, the part-time factor could be determined and that ratio is applied to the non-respondents to determine the number of FTEs (Table 6). If a correction of 5% is applied, for example, to cover archaeologists that were missed at *Rijkswaterstaat* and the Water Boards, this results in a total of 1335 persons working in Dutch archaeology in 2013.

2013 (sub)sector	No. of persons (Response data)	FTEs	Additional no. of persons (Estimate)	FTEs	Total	FTEs	% response
State	65	59.5	6	5.5	71	65	5,6%
Provinces	14	10.6	18	13.6	32	24.2	2,5%
Municipalities	132	106.7	84	67.9	216	174.6	17,0%
Universities	38	27.2	277	198.3	315	225.5	24,8%
Semi-government	78	56.5	81	58.7	159	115.2	12,5%
Companies	171	153.6	241	216.5	412	370.1	32,4%
Self-employed	21	10.7	45	22.9	66	33.6	5,2%
total	**519**	**424.8**	**752**	**583.4**	**1271**	**1008.2**	**100,0%**

Table 6. Rate per (sub)sector of the number of persons employed in the archaeology/FTEs (n=93).

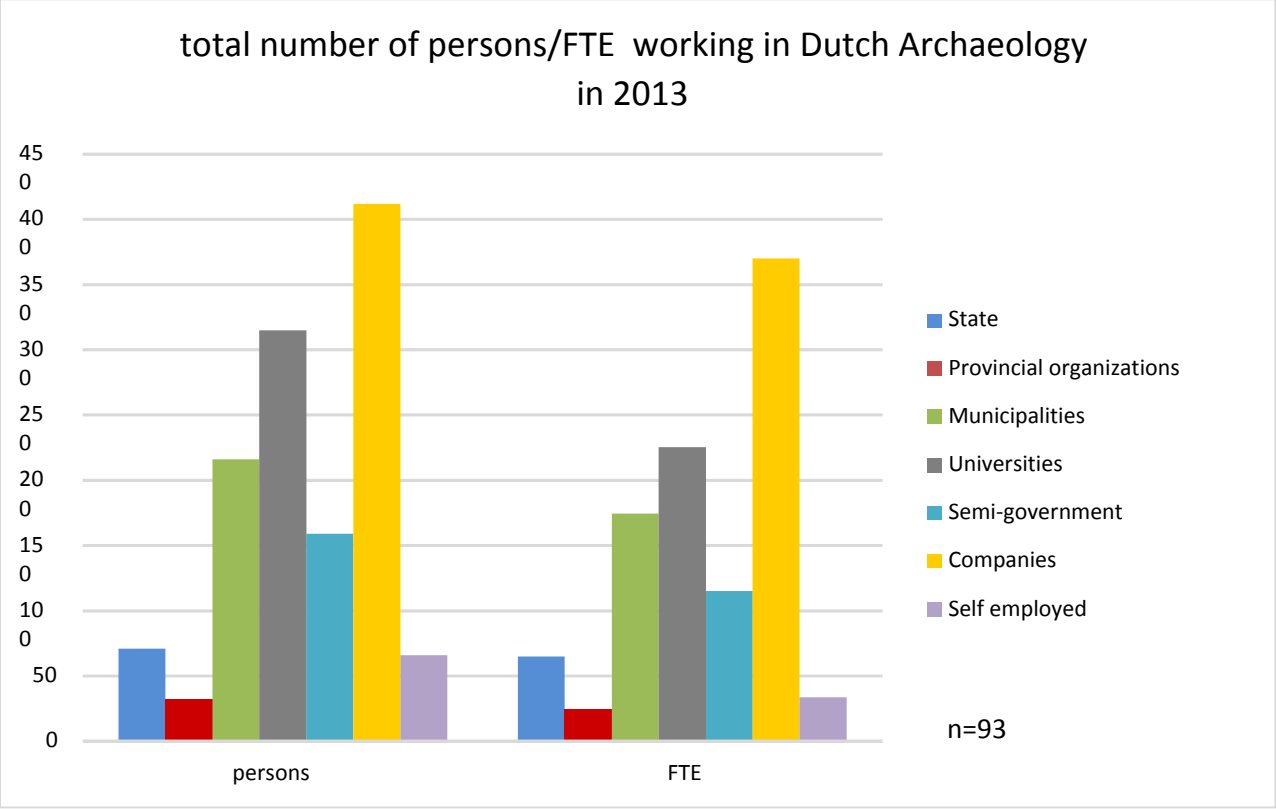


Figure 1. Number of persons and FTEs working in archaeology according to respondents, supplemented by estimated number (n=93).

2013 No. of employees	No. of organizations (response)	% of total no. of respondents	Additional no. of organizations, non-respondents (estimate)	Total no. of employees, non-respondents (estimate)
1	38	41%	88	88
2 to 6	37	40%	37	156
7 to 10	10	11%	9	73
11 to 25	6	6%	7	119
26 to 49	0	0%	3	111
50 to 99	2	2%	0	0
100 to 149	0	0%	0	0
150 to 250	0	0%	1	205
total	**93**	**100%**	**145**	**752**

Table 7. Number of persons employed in archaeology (calculated and estimated) based on size of the organization (n=93). The biggest missing organization belongs to the (sub)sector of universities.

2.6.4 Confidence in estimated size

Assuming 5% of the sector has not been reached through the questionnaire, the sector encompasses 272 organizations, institutions and businesses (5% correction of 259 organizations in the mailing list). With a response of 114, a dispersion in the answers of 25% and an accuracy margin of 5.1% this means that the answers are 90% reliable for the sector. Calculating the (sub)sectors government, semi-government, private enterprises and self-employed professionals, deviations are higher. With a reliability of 90% and an expected spread in the reply of 25% are the deviations in the possible answers for the Government at 7.3%, the semi-government at 13.5%, the private companies at 11.7% and self-employed professionals at 11.5%. These higher variances for (sub)sectors are caused because of the relatively small scale. In other words, the greater the total population the smaller the sample size can be.

2.6.5 Confidence in all results

Respondents were asked to which (sub)sector they belong.

2013 organizations	No. of organizations	response %
State	3	3%
Provincial organizations	8	7%
Municipalities	36	32%
Universities	2	2%
Semi-government	19	17%
Companies for field archaeology	10	9%
Consultancies	5	4%
Engineering companies	3	3%
Specialist companies	1	1%
Education	2	2%
Self-employed	25	22%
total	**114**	**100%**

Table 8. Number of respondents by type of (sub)sector.

Compared to 2007-2008 there is an increase in the response of municipalities. A breakdown by type of company has been added for private enterprises in 2012-13. In absolute terms, an increase in the response can be noted, both in the private sector and self-employed professionals.

2013 organizations	2007-2008[22]	response %	2012-2013[23]	response %
State	3	5%	3	3%
Provincial organizations	5	8%	8	7%
Municipalities	9	15%	36	32%
Universities	5	8%	2	2%
Semi-government	8	13%	19	17%
Private enterprises	16	26%	21	19%
Companies in field archaeology	0	0%	10	9%
Consultancies	0	0%	5	4%
Engineering companies	0	0%	3	3%
Specialist companies	0	0%	1	1%
Education	0	0%	2	2%
Self-employed	15	24%	25	22%
Other	1	2%	0	0%
total	**62**	**100%**	**114**	**100%**

Table 9. Number of respondents by organization type

Table 10 shows the number of respondents and non-respondents per (sub)sector giving

[22] Waugh 2008
[23] This reporting

insight in the calculated response per (sub)sector.

2013 (sub)sector	respondents	Non response	total	% response
State	3	2	5	60.0%
Provinces	8	12	20	40.0%
Municipalities	36	24	60	60.0%
Universities	2	7	9	22.2%
Semi-government	19	35	54	35.2%
Companies	21	24	45	46.7%
Self employed	25	41	66	37.9%
total	**114**	**145**	**259**	**44.0%**

Table 10. Number of respondents and non-respondents per (sub)sector.

2.6.6 Creation of business activities

In the questionnaire, organizations could choose from eighteen activities the company runs. Multiple answers were possible. In drawing up the report it was decided to follow the English model and use four main groups: 'field work and research', 'policy and advice', 'public and conservation' and 'science and education'.

'Field work and research' includes the activities of staff mediation, project management/supervision, prospecting, excavation work (licence holders), archaeological guidance, technical support and specialist support. These are (mostly) activities mentioned in the Dutch Archaeological Quality Standard.

Activities that fall under 'policy and advice' are archaeological advice/policy support, policy development, policy implementation, policy enforcement and quality assurance.
Public activities, heritage education and preservation/conservation fall under the category 'public and conservation'. Scientific research, education and advanced training courses are grouped under 'education and science'.

2013 n=		(sub)sector	Fieldwork and Research	Policy and advice	Public and conservation	Education and science
49	**O**		**39**	**43**	**41**	**20**
3		State	1	1	0	2
8		Provinces	6	8	6	1
36		Municipalities	32	34	34	15
2		Universities	0	0	1	2
19	**SO**		**11**	**9**	**14**	**7**
46	**P**		**38**	**21**	**21**	**15**
21		Companies	17	10	11	4
25		Self-employed	21	11	10	11
114	**total**		**88**	**73**	**76**	**42**

Table 11. Main groups of business activities per (sub)sector (O=government, SO=semi-government, P=private companies).

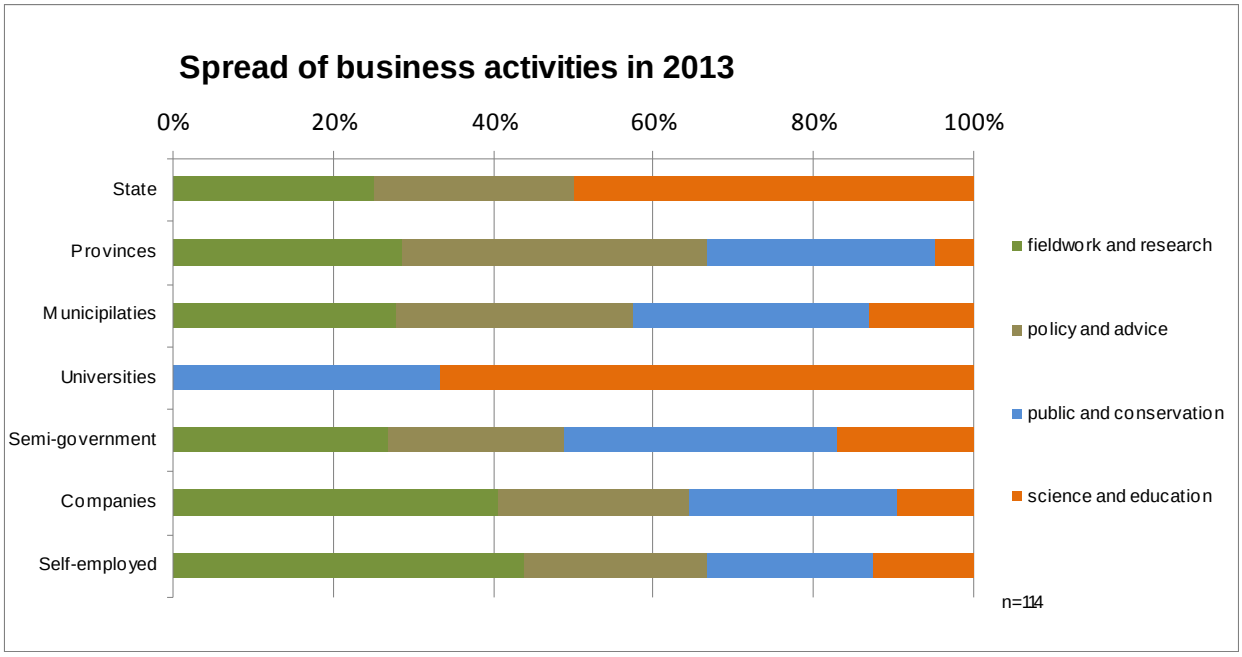


Figure 2. Distribution operations per (sub)sector.

Some organizations are mainly concerned with one (main) activity, while others have multiple activities. This is shown in Table 12.

2013	main	% of total no. of organizations with a single activity	% of total no. of organizations		multiple	% of total no. of organizations
Fieldwork and research	12	46%	11%		67	59%
Policy and advice	8	31%	7%		73	64%
Public and conservation	5	19%	4%		71	62%
Science and education	1	4%	1%		45	39%
total	**26**	**100%**	**23%**		n/a.	n/a.

Table 12. Number of organizations broken down by activity (n=114).

Table 13 shows numbers of persons related to business activity. The information is incomplete, because 15 organizations gave no indication of the number of staff. The total number of persons and companies in the category 'mixed' could not be counted, because these people can be within more than one group activities. In the fifth column the number of companies are indicated.

2013	main	%	No. of persons		multiple	% of the total no. of organizations with mixed activities	No. of persons
Fieldwork and research	12	46%	16		67	76%	417
Policy and advice	8	31%	15		73	83%	431
Public and conservation	5	19%	6		71	81%	276
Science and education	1	4%	14		45	51%	361
total	**26**	**100%**	**51**		n/a	n/a	n/a

Table 13. Number of organizations and persons employed ordered by activity (n=99).

3 Organizations

3.1 Introduction

This section describes various aspects of the labour market on the level of organizations. A format is created by type of organization per (sub)sector, i.e. government, semi-government and private enterprises. Among others, the organization size, the composition of staff (including support), geographical distribution of the activities and personnel movements are discussed.
The tables show only the results from the response group. As not all 114 respondents filled out the questionnaire completely, the numbers on which the outcome is based (n=) are explicitly mentioned in each table.

3.2 Organization type

In the questionnaire organization type could be chosen: government (State, provincial and municipal), semi-government (provincial office (*steunpunt*), regional agencies (*RUD*), heritage institution), education (university), company (engineering firm, consulting firm, excavation company, specialist agency, supporting company or self-employed professionals) and other. In total 15 different organization types are defined. This format is consistently reflected in this study.

		Explanation of the codes used
O		**Government**
	G	Municipalities
	P	Provinces
	R	State
	U	Universities
SO		**Semi-government**
	M	Museums
	O	Other
	R	Regional agencies
	S	Provincial offices (*steunpunten*)
P		**Private companies**
	A	Consulting firm
	E	Education/Heritage firms
	G	Excavation firms
	I	Engineering firms
	O	Supporting company
	S	Specialist agency
	Z	Self-employed

Table 14. Explanation of codes used in the data presentation.

3.3 Organization size

The organization size is determined on the basis of the number of employees both in numbers as FTEs. The interval for the organization size is narrow because the sector knows many small-scale organizations. In order to comply with the activities under permit organizations need to put a lower limit to size. The spread to organizational size is relevant to various aspects of the market (market share, competitiveness) and quality assurance (available capacity, knowledge and skills).

2013		
Organization size	**No. of organizations**	**percentage of total no. of organizations**
1	38	41%
2-6	37	40%
7-10	10	11%
11-25	6	6%
26-49	0	0%
50-99	2	2%
100-249	0	0%
250+	0	0%
total	**93**	**100%**

Table 15. Organization size across the sector in 2013 (n=93, 20 organizations have not filled in this question).

Table 15 shows the number of employees of 72 companies and (governmental) institutions and 21 self-employed professionals, categorized by organization size. Of the 113 respondents 20 did not fill in this question. The sector, as represented by the respondents, is dominated by small organizations (2-6 persons) and self-employed professionals. There are only two (relatively) large organizations, that is, with between 50 and 99 employees.

Usually, support staff and volunteers work within organizations besides archaeologists. Table 16 shows the composition of the staff divided in archaeological work and support. In addition, the extent to which organizations use (unpaid) volunteers is made visible.

2013							
No. of employees	**Total no. of organizations**	**Total no. of employees**		**Size of support staff**		**Volunteers**	
		No. paid	percentage	No. paid	percentage	No. unpaid	percentage
1	38	38	7%	0	0%	11	3%
2-6	37	130	25%	14	15%	225	55%
7-10	10	87	17%	18	19%	93	23%
11-25	6	102	20%	21	23%	78	19%
26-49	0	0	0%	0	0%	0	0%
50-99	2	162	31%	40	43%	0	0%
100-249	0	0	0%	0	0%	0	0%
250+	0	0	0%	0	0%	0	0%
total	**93**	**519**	**100%**	**93**	**100%**	**407**	**100%**

Table 16. Composition of the staff to organization size in the sector to substantive staff, support and volunteers (n=93, 20 organizations have not filled in this question).

There is not always a clear separation to be made between substantive and support work. A reasonable assumption is that for small organizations work from the primary and secondary process are fluid. Self-employed professionals have no support staff as a separate category. For the volunteers, no distinction can be made between volunteers who carry out archaeological activities and which are not.
The large organizations have most support and do not use volunteers.

Organization size in no. of employees	**total no. of employees**						**No. of employees excl. support staff**	
	2008		**2012**		**2013**		**2013**	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
1	34	6%	37	7%	38	7%	38	7%
2-6	116	22%	123	23%	130	25%	116	22%
7-10	54	10%	90	17%	87	17%	69	13%
11-25	92	17%	88	16%	102	20%	81	16%
26-49	65	12%	26	5%	0	0%	0	0%
50-99	66	12%	63	12%	162	31%	122	24%
100-249	109	21%	107	20%	0	0%	0	0%
250+	0	0%	0	0%	0	0%	0	0%
total	**536**	**100%**	**534**	**100%**	**519**	**100%**	**426**	**82%**

Table 17. Size of organizations in 2008 (n=85, 28 organizations have not filled in this question), 2012 (n=92, 21 organizations have not filled in this question) and 2013 (n=93, 20 organizations have not filled in this question). For 2008, the percentage of the column in the category 100-249 has been rounded up to 21% to compensate the rounding differences.

Table 17 shows the development of organization size. Large and medium-sized organizations decrease in the period between 2008 and 2013. The smaller organizations grow in number. The total number of employees decreases from 536 to 519 (3% shrinkage).

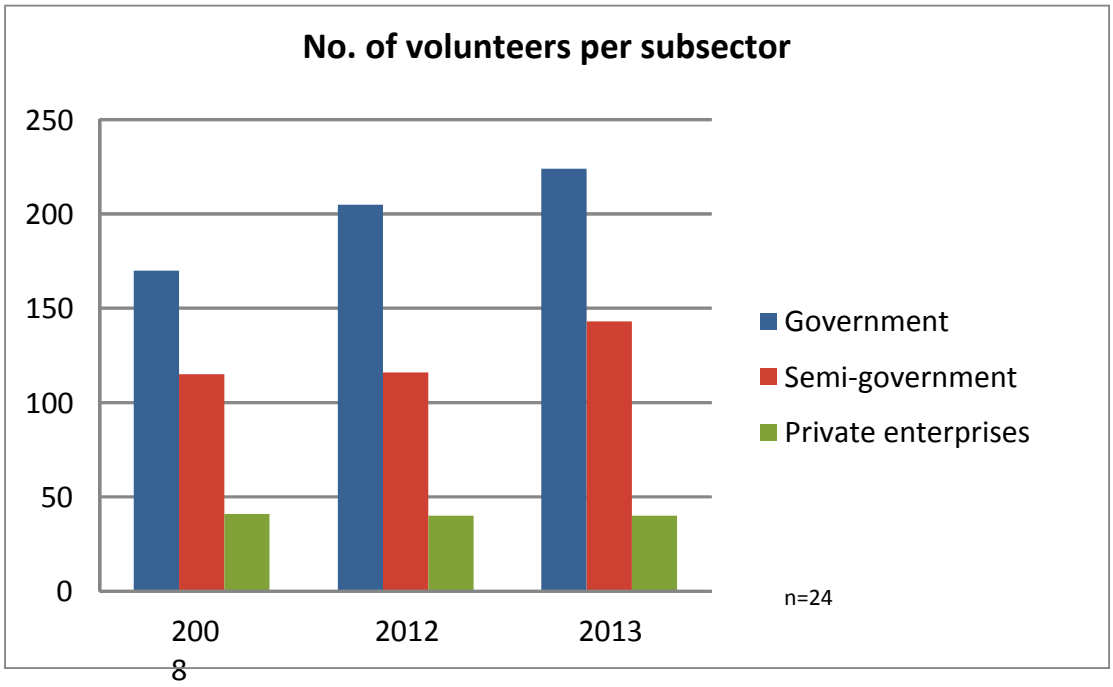


Figure 3. Number of volunteers per (sub)sector in the years 2008 (n=17), 2012 (n=17), 2013 (n=24).

Figure 3 is based on a relatively small number of respondents. Only volunteers of organizations that filled in the number of volunteers for all years are taken into account. It appears that volunteers work for the semi government especially in museums and heritage institutions (respectively for 2008, 2012 and 2013: 95, 93 and 119). In the public sector, only municipalities use volunteers. For the year 2013, 24 organizations say they have a total of 407 volunteers, good for 113 FTEs. Given the size of the sector, there are many volunteers working in archaeology, in particular in the public sector.

3.4 Geographical distribution of organizations

For the geographical distribution of organizations and their work, only the private sector is looked at (archaeological companies including self-employed professionals) because by definition local governments work locally. Despite that certain municipalities are allowed to carry out archaeological research outside their municipality borders, they will remain a locally oriented municipality. The municipality of Groningen will have no archaeological activities in Maastricht.

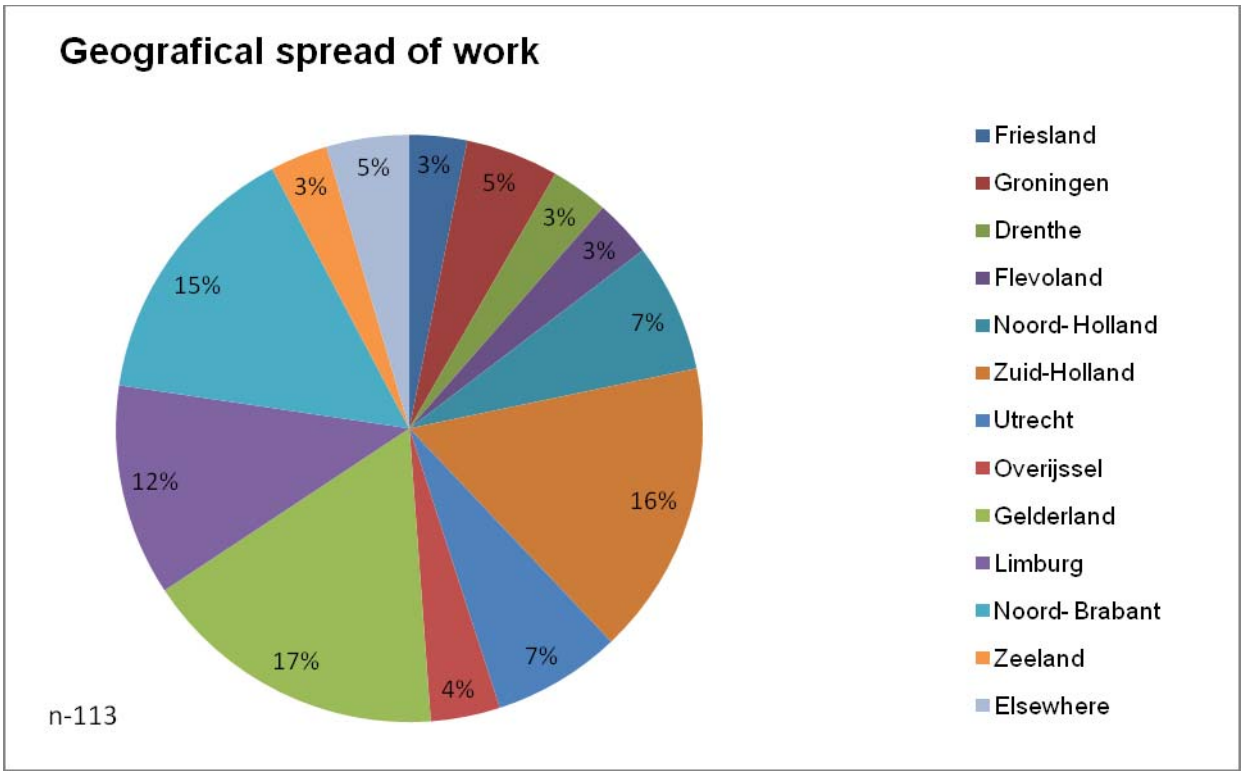


Figure 4. Work spread by province and also outside the Netherlands in percentage (n=113).

The respondents were asked to indicate in which provinces, more than half of the turnover is generated. Under 'Elsewhere' are both activities in the Mediterranean region, Belgium, Germany and the overseas territories. Most activities are carried out in the provinces of Gelderland, Noord-Brabant and Zuid-Holland. Most staff are deployed in Gelderland. Companies are mainly active in the Netherlands.

2013				
	No. of organizations/ companies	**percentage**	**No. of persons**	**percentage**
Friesland	13	6%	14	3%
Groningen	14	7%	20	4%
Drenthe	13	6%	11	2%
Flevoland	12	5%	24	5%
Noord-Holland	16	7%	48	9%
Zuid-Holland	26	12%	70	14%
Utrecht	19	9%	17	3%
Overijssel	13	6%	25	5%
Gelderland	26	12%	146	28%
Noord-Brabant	22	10%	65	13%
Zeeland	28	13%	26	5%
Limburg	12	5%	33	6%
Special municipalities of the Netherlands	1	0%	3	1%
Outside of the Netherlands	4	2%	16	3%
total	**219**	**100%**	**518**	**100%**

Table 18. Geographic spread of activities and the number of persons employed (n=113). The percentage of the province of Groningen is rounded up (7%) to compensate rounding differences.

Figures 5, 6 and 7 (below) show the geographical distribution of persons employed by government (246 persons, excluding volunteers), semi-government (28 persons, excluding volunteers) and private companies excluding the self-employed professionals (174 persons, excluding volunteers). Elsewhere refers to persons deployed by Dutch organizations in the Mediterranean region, Belgium and Germany.
The government has the highest concentration of workers in the peri-urban zone (provinces of Noord- and Zuid-Holland and Noord-Brabant).

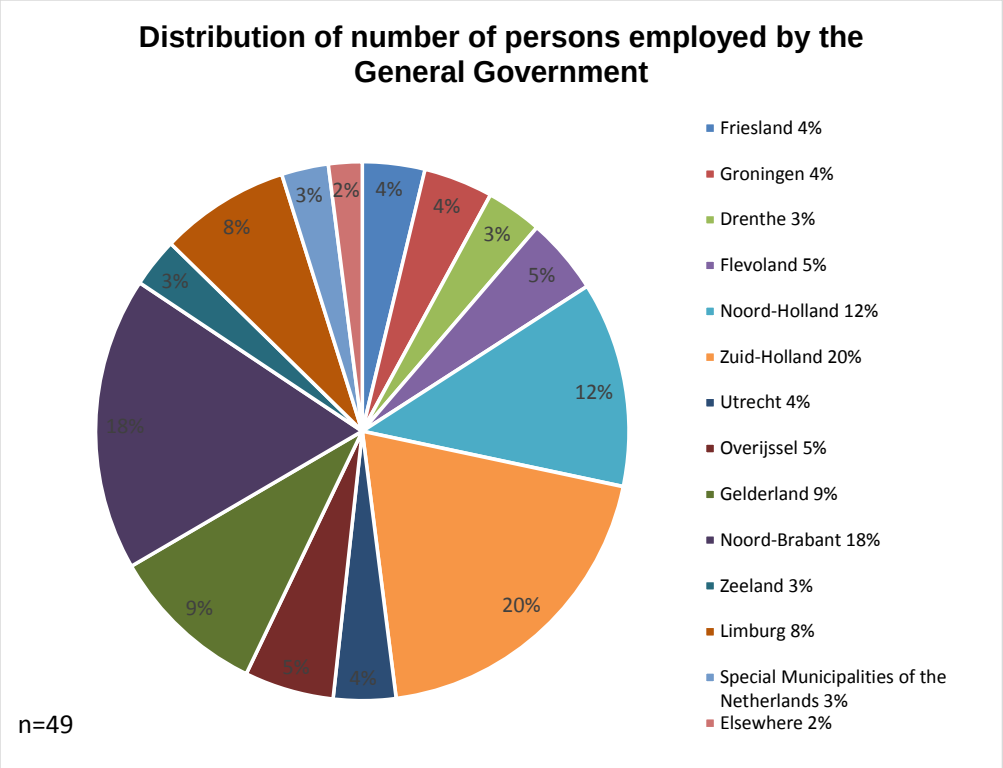


Figure 5. Distribution of the number of persons employed by the General Government (n=49).

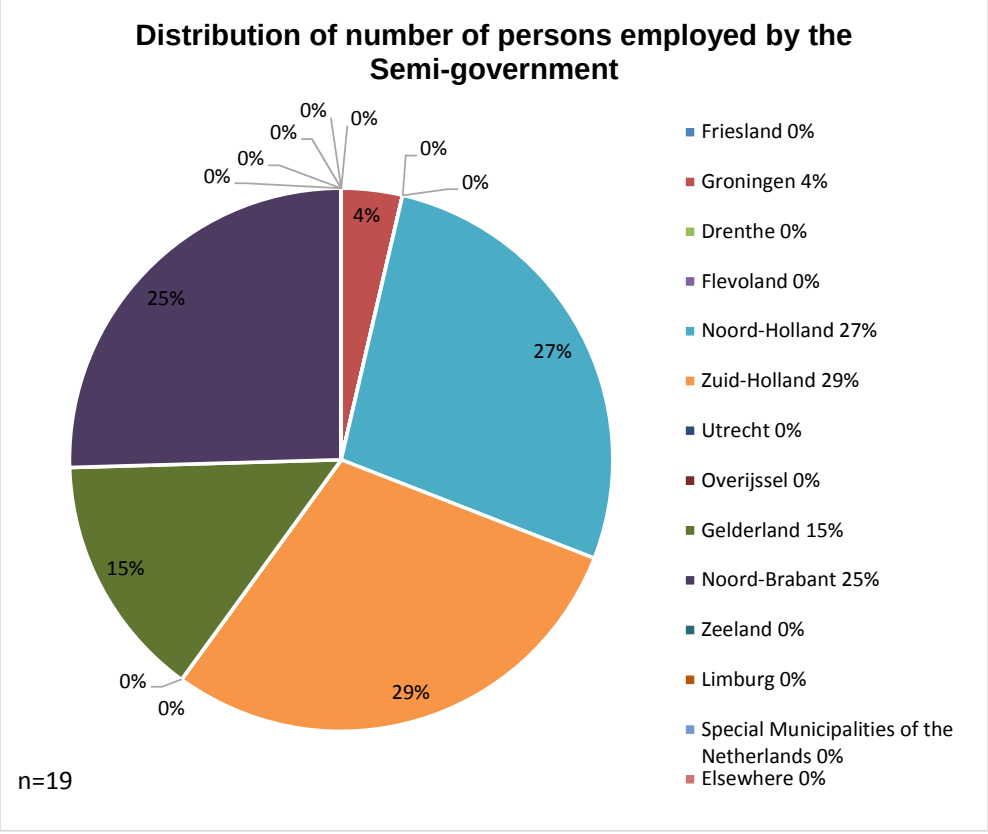


Figure 6. Staggering number of persons working at the semi-government (n=19).

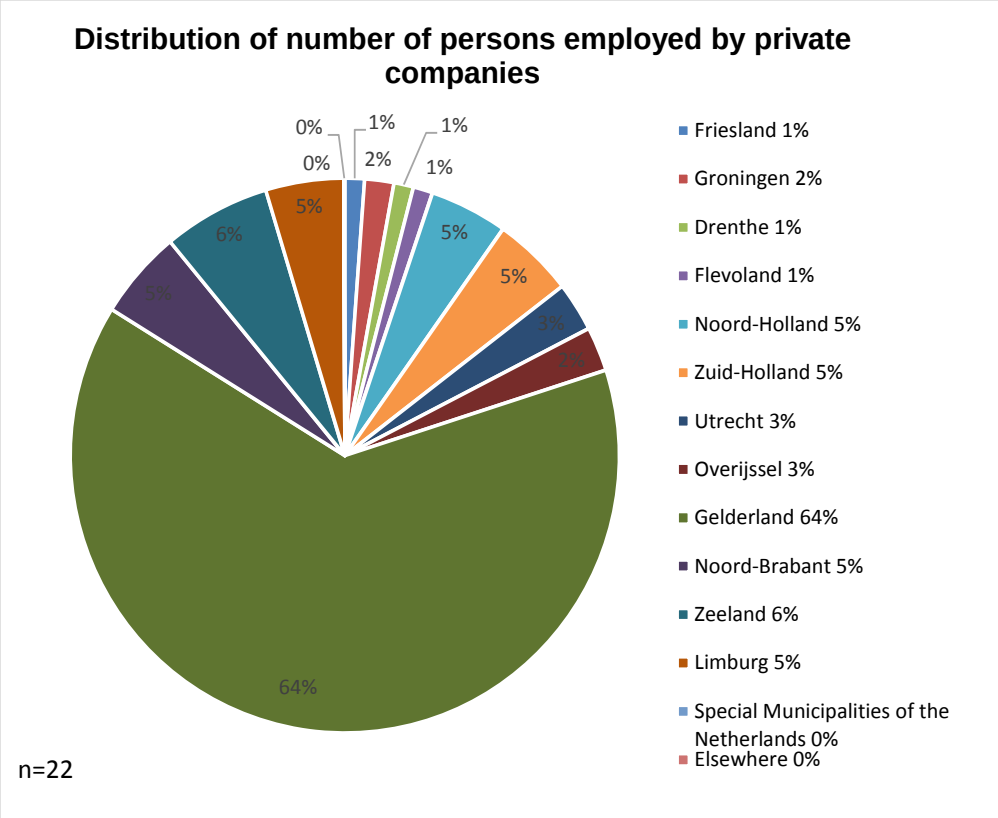


Figure 7. Distribution number of persons employed by private companies, excl. self-employed professionals (n=22).

3.5 Staff mobility

In this section staff mobility is looked at per (sub)sector for the years 2008, 2012 and 2013 (Table 19 and 20). Table 19 gives an overview of all respondents including starters in this period. The Government and semi government show growth in personnel between 2008 and 2012 which decreases slightly in the year 2013. In relation to 2008, the year 2013still indicates growth. The shrinkage takes place in the last year (between 2012-13). The number of employees at companies gives a downward trend, although the number of FTE increases from 2008 to 2012. With fewer people initially, until 2012, more worked has been carried out. Because the respondents did not fill in all questions consistently for the entire period, the analysis may not completely reliable and therefore is a further selection was made (Table 20 and below).

	2008			2012			2013		
	No. of persons (n=85)	**FTEs** (n=82)	***ratio***	**No. of persons** (n=93)	**FTEs** (n=91)	***ratio***	**No. of persons** (n=93)	**FTEs** (n=91)	***ratio***
O	242	200	0.83	257	214	0.83	249	206	0.83
SO	72	50	0.69	79	56	0.71	78	56	0.72
P	221	149	0.67	201	167	0.83	192	163	0.85
Total	**535**	**399**	**0.75**	**537**	**437**	**0.81**	**519**	**425**	**0.82**

Table 19. Number of persons /FTEs employed in archaeology in the years 2008 (n=85), 2012 (n=93), 2013 (n=93) per (sub)sector (O=government, SO= semi-government, P=private companies).

Table 20 and beyond is based on respondents from organizations that existed in 2008 as well as in 2013 and have completed the questionnaire for the number of employees and FTE (n=64). This means that trends that are visible only representing organizations that were continuously active over the years 2008 to 2013.
Persons employed by the government remained reasonable constant with some swing. More people come to work for the semi government since 2008. The staff at the companies took in number until 2012, after which the number reduced in one year. However, the number of FTE shrank less indicating less part-time work (efficiency). The number of self-employed professionals increased.

	2008					2012					2013		
	persons	**FTE**	***ratio***	***A %***	***FTE%***	**persons**	**FTE**	***ratio***	***A %***	***FTE %***	**persons**	**FTE**	***ratio***
O	242	198	0.82	99%	99%	247	205	0.83	101%	103%	244	200	0.82
SO	59	43	0.73	84%	88%	71	49	0.69	101%	100%	70	49	0.70
P	164	134	0.82	103%	94%	170	145	0.85	107%	101%	159	143	0.90
ZZP	16	6	0.38	76%	60%	20	14	0.70	95%	140%	21	10	0.48
total	**481**	**381**	**0.79**	**97%**	**95%**	**508**	**413**	**0.81**	**103%**	**103%**	**494**	**402**	**0.81**

Table 20. Number of persons/FTEs employed in archaeology and percentage shift in the years 2008 and 2012 to 2013, per (sub)sector (O=government, SO=semi-government, P=private companies) (n=64).

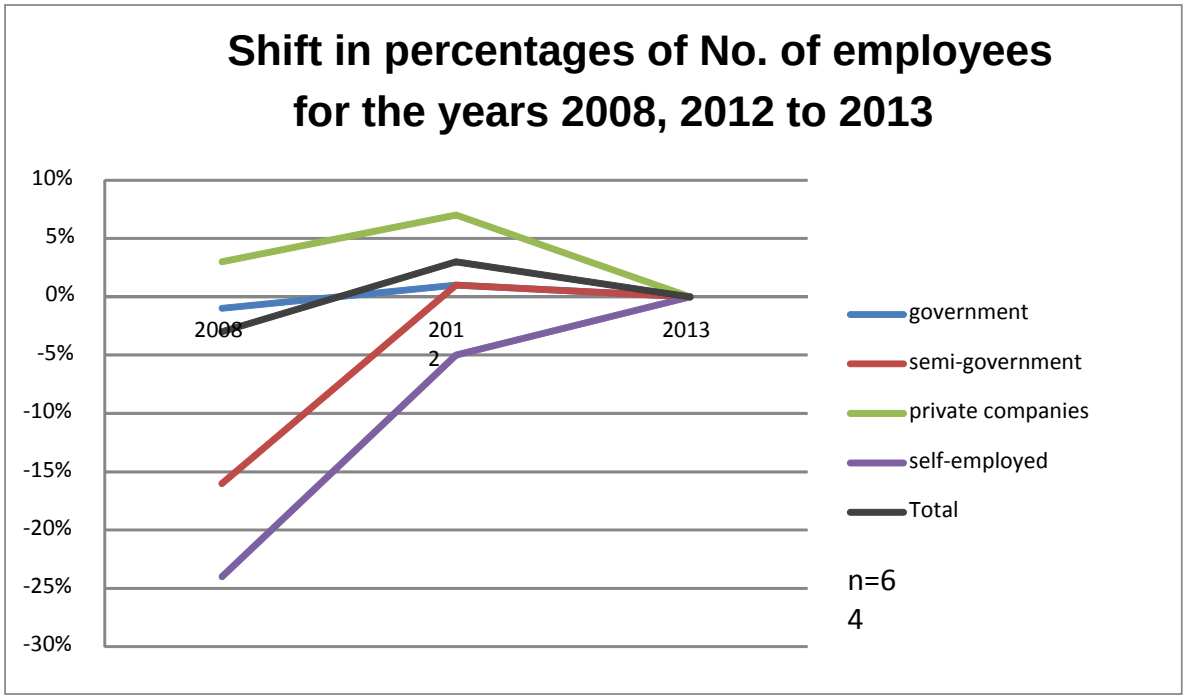


Figure 8. Percentage changes in number of various (sub)sectors of the archaeological sector (n=64).

Figure 8 shows that the labour situation of the year 2013 is caused by an increased number of self-employed workers and employees at the semi government. The Government remains fairly constant. The private sector (excl. self-employed professionals) is shrinking. Overall, there has been growth between the years 2008 and 2012, but shrinkage of numbers in the year 2013.

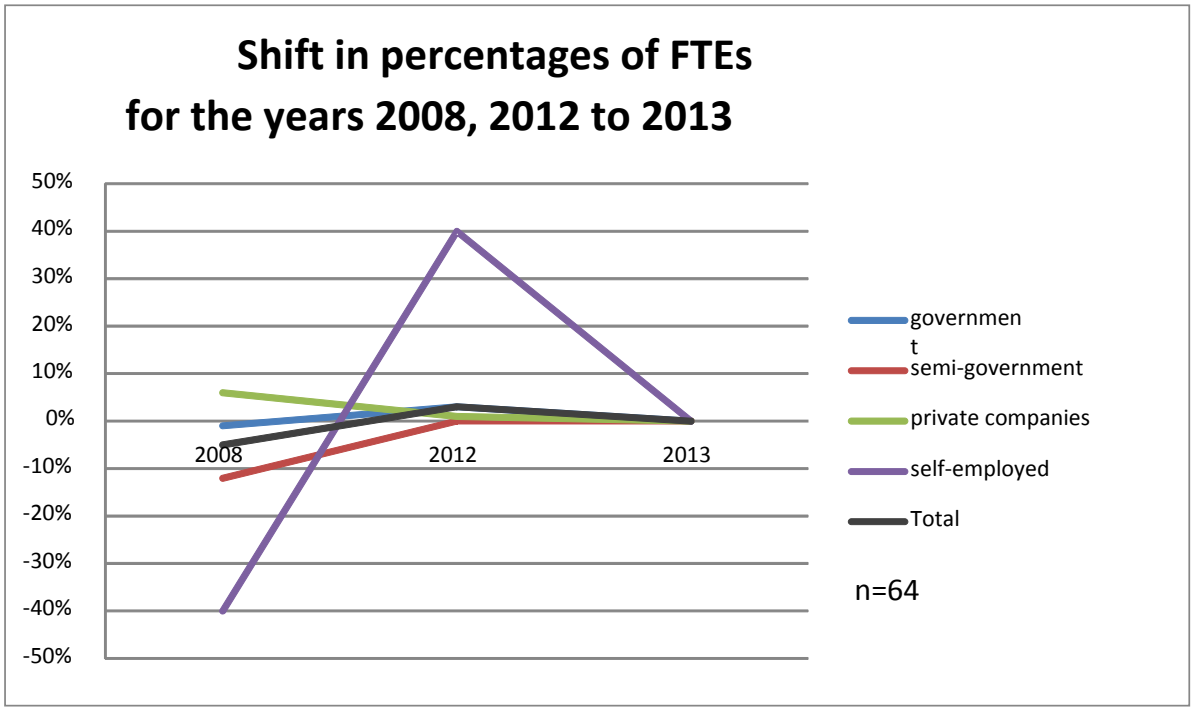


Figure 9. Percentage of change in FTE in the various (sub)sectors (n=64).

Self-employed professionals	2008	2012	2013
Ratio FTEs/No. of persons	0.38	0.70	0.48
Growth or shrinkage in no. of persons	0%	25%	6.25%
Growth or shrinkage in FTEs	0%	133%	-29%

Table 21. Change in number of self-employed professionals and FTEs in 2012 compared to 2008 and the change in 2013 compared to 2012 (n=24).

The number of self-employed professionals takes over the years 2008 to 2012 as did the number of hours worked (in FTEs). However, in 2013, there is a marked decrease in the hours worked. So, there are more self-employed professionals, but with less work (Table 21). In combination with Figure 9, it becomes evident that self-employed professionals have difficulty in finding a full workload between 2012 and 2013. Their number increased, but they have no full-time work.

Table 22 shows the breakdown by organization type in the private sector. Companies have a much higher exploitation (more FTEs) of an employee than the self-employed professionals. Excavation companies have a vast share of persons and FTEs. A shrinkage (8.8%) occurs at these companies from 147 (2012) to 134 persons in the year 2013.

	2008			2012			2013		
Private (sub)sector	**persons**	**FTE**	**ratio**	**persons**	**FTE**	**ratio**	**persons**	**FTE**	**ratio**
Consultancy firms (PA)	4	3	0.75	5	4	0.8	5	4	0.8
Education/heritage firms (PE)	2	2	1	2	2	1	2	2	1
Excavation firms (PG)	143	118	0.83	147	126	0.86	134	121	0.9
Engineering firms (PI)	13	10	0.77	13	12	0.92	15	14	0.93
Specialist firms (PS)	2	2	1	3	2	0.67	3	2	0.67
Firms total (excl. self- employed prof.)	**164**	**134**	**0.82**	**170**	**145**	**0.85**	**159**	**143**	**0.9**
Self-employed professionals	16	6	0.38	20	14	0.7	21	10	0.48
Private sector in total	**180**	**140**	**0.78**	**190**	**159**	**0.84**	**190**	**153**	**0.85**
Total sector	**481**	**381**	**0.79**	**508**	**413**	**0.81**	**494**	**402**	**0.81**

Table 22. Number of persons/FTEs working in the private sector and the ratio FTEs/number of employees for the years 2008, 2012, 2013 (n=64).

	2008	2012	2008	2012	2013
	No.	*No.*	*FTEs*	*FTEs*	*No./FTEs*
Consultancy firms (PA)	-20%	0%	-25%	0%	0%
Education/ heritage firms (PE)	0%	0%	0%	0%	0%
Excavation firms (PG)	7%	10%	-2%	4%	0%
Engineering firms (PI)	-13%	-13%	-29%	-14%	0%
Specialist firms (PS)	-33%	0%	0%	0%	0%
Firms total (excl. self-employed professionals)	**3%**	**7%**	**-6%**	**1%**	**0%**
Self-employed professionals	-24%	-5%	-40%	40%	0%
Private sector in total	**0%**	**6%**	**-8%**	**4%**	**0%**
Total sector	**-3%**	**3%**	**-5%**	**3%**	**0%**

Table 23. Percentage change in number of persons/FTEs working in the private sector and the ratio FTEs/number of employees for the years 2008, 2012, 2013 (n=64).

Excavation firms, accounting for 75% of the private sector, have a slight increase at first and after a shrinkage of the numbers of employees (Figure 10). All other types of companies in the private sector exhibit growth, in which the specialist companies and the self-employed professionals have the largest growth. This shift can be a result of people who have worked initially at an excavation firm have started as an independent whether or not by forced resignation. As can be seen in Figure 11, self-employed professionals have smaller workload in the year 2013 compared to 2012.

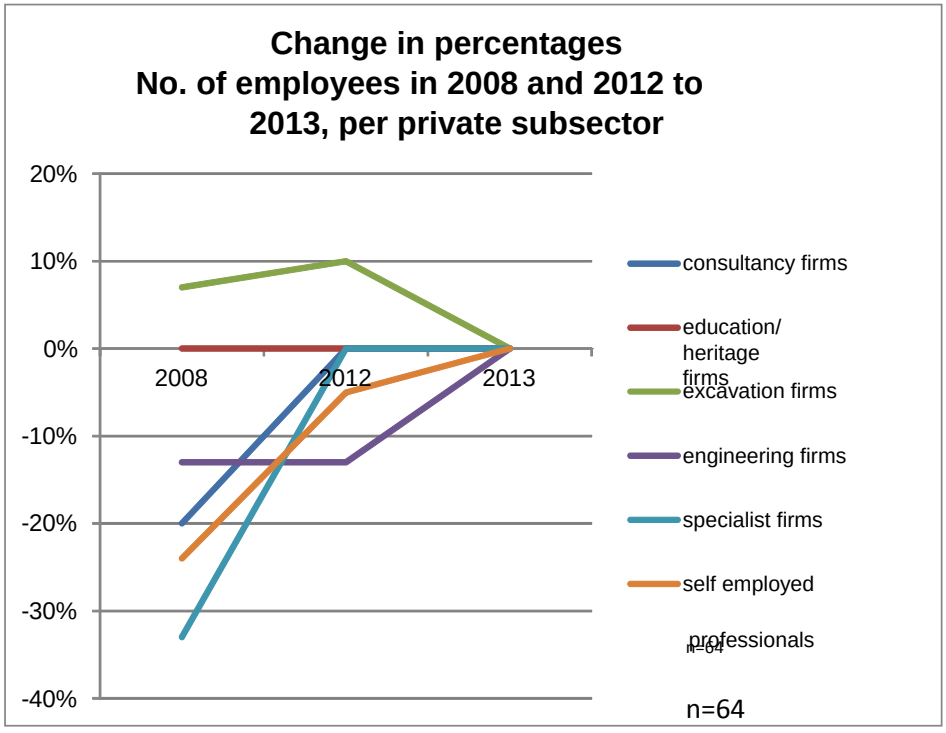


Figure 10. Percentage change in the number of persons employed in the private sector in the years 2008-2012-2013 (n=64).

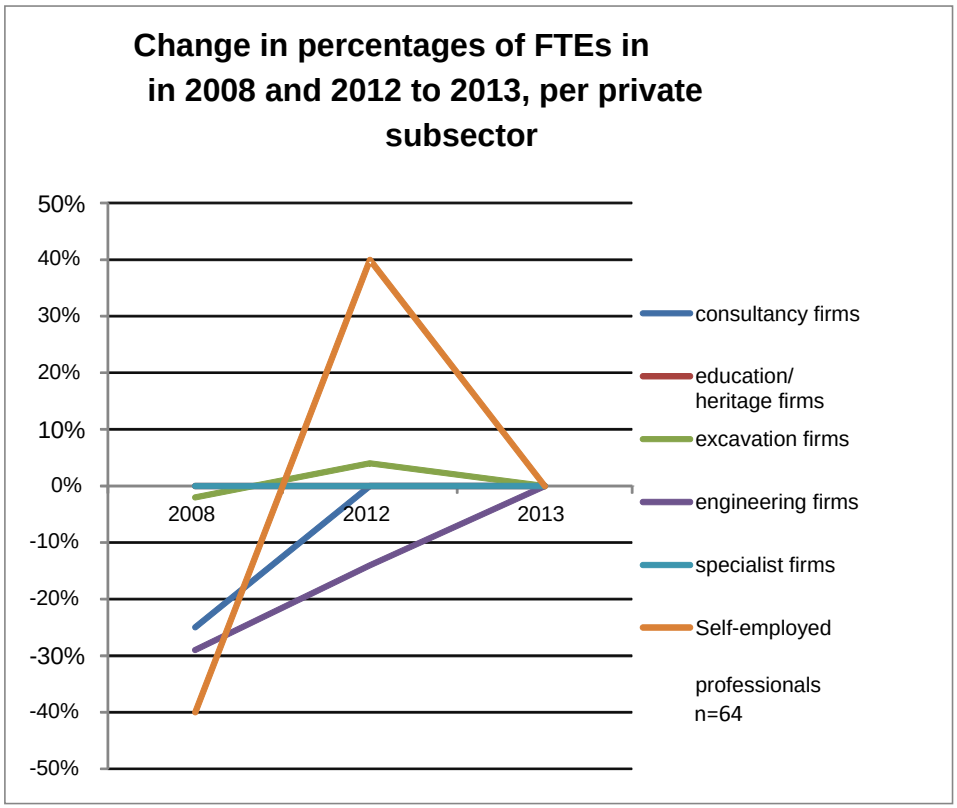


Figure 11. Percentage change in FTE in the private sector in the years 2008-2012-2013 (n=64).

Change in organization size	2008		2012	
	No. of organizations	%	No. of organizations	%
More workers in relation to resp. 2012 and 2013 (shrinkage)	14	15.7%	10	11.2%
Even no. of workers in relation to resp. 2012 and 2013	32	36.0%	57	64.1%
Less workers in relation to in resp. 2012 and 2013 (growth)	30	33.7%	9	10.1%
Unknown	13	14.6%	13	14.6%
total	**89**	**100%**	**89**	**100%**
Incomplete information	7	7.9%		

Table 24. Change in company size in 2012 and 2013 compared to 2008 and 2012 respectively (n=89).

Change in organization size (FTEs)	2008		2012	
	No. of organizations	%	No. of organizations	%
More FTEs in relation to resp. 2012 and 2013 (shrinkage)	17	19.1%	14	15.7%
Even no. of FTEs in relation to resp. 2012 and 2013	25	28.1%	52	58.4%
Less FTEs in relation to in resp. 2012 and 2013 (growth)	34	38.2%	10	11.3%
Unknown	13	14.6%	13	14.6%
total	**89**	**100%**	**89**	**100%**
Incomplete information	7	7.9%		

Table 25. Change in company size in number or FTEs in 2012 and 2013 compared to 2008 and 2012 respectively (n=89).

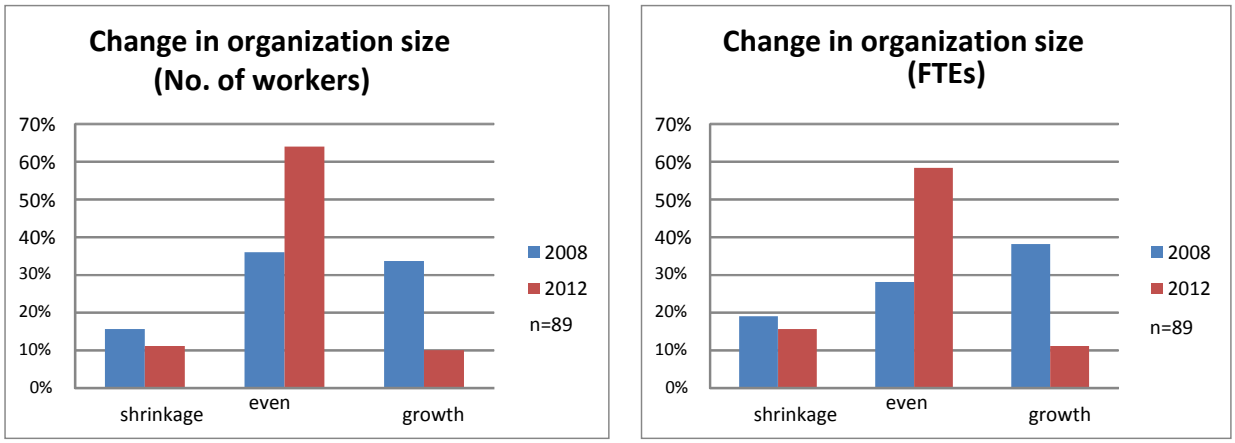


Figure 12a. Change in organization size (number/FTEs) for the archaeological sector respectively in 2012 and 2013 for the 2008 and 2012 (n=89).

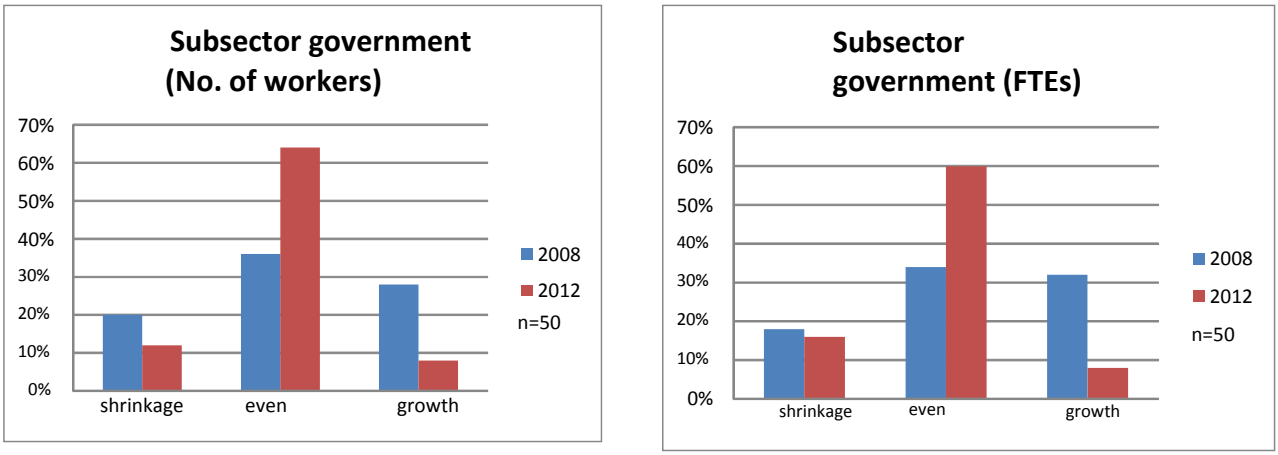


Figure 12b. Change in organization size (number/FTEs) at the government in 2012 and 2013 for the 2008 and 2012 respectively (n=50).

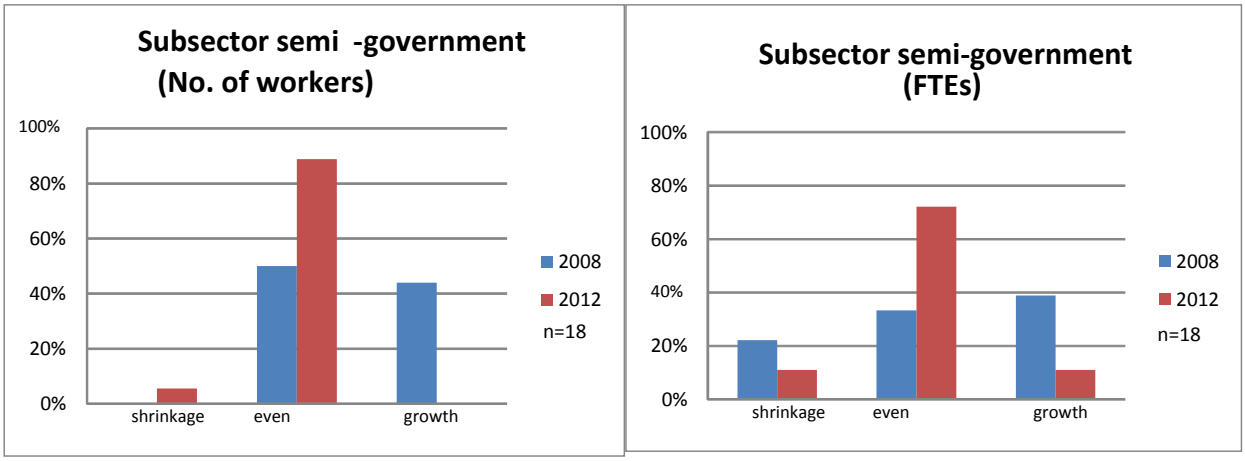


Figure 12c. Change in organization size (number/FTEs) at the semi-government in 2012 and 2013 for the 2008 and 2012 respectively (n = 18).

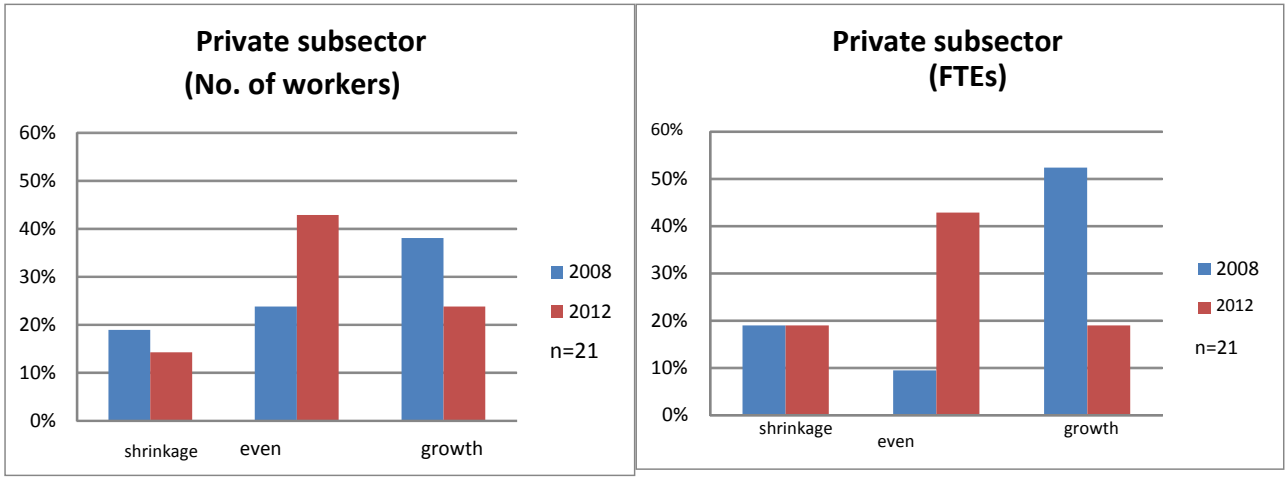


Figure 12d. Change in organization size (number/FTEs) at private companies respectively in 2012 and 2013 for the 2008 and 2012 (n=21, incl. self-employed=1).

Figures 12 a, b and c show the shift in organization size per (sub)sector in 2012 and 2013 related to the years 2008 and 2012. The number of FTEs is grown in all three (sub)sectors. Decrease in the number of FTEs is especially visible at several Government organizations (18% in 2012 and 16% in 2013) and at some private organizations including self-employed professionals (19%). Private companies have seen most changes in the year 2013 compared to 2012.

In addition to historical trend data on organization size, respondents were asked about their

future. In the questionnaire, one could indicate the expectation in a percentage of the expected growth or shrinkage. What stands out is that the organizations, despite the crisis, are generally not very pessimistic. Shrinkage and growth forecasts do not out run each other much.

	2014				2016			
Size of staff	No. of organizations	%	FTEs	%	No. of organizations	%	FTEs	%
More than present (growth)	5	5%	10	11%	9	10%	10	11%
Equal	35	38%	30	32%	31	33%	29	31%
Less than present (shrinkage)	8	9%	9	9%	8	8%	8	8%
No workers	25	27%	25	26%	26	28%	26	28%
Incomplete information	20	22%	21	22%	20	21%	21	22%
total	**93**	**100%**	**95**	**100%**	**94**	**100%**	**94**	**100%**

Table 26. Forecast of organizations of change in headcount. 2014 is compared to 2013 and 2016 to 2014 (n=95). The contraction forecast (8%) are rounded up due to the compensation of rounding differences.

	No. of organizations expecting change in 2014								No. of organizations expecting changes in 2016							
	In no. of workers								In no. of workers							
	more	%	even	%	less	%	none	non response	more	%	even	%	less	%	none	non response
total	5	5%	35	37%	8	8%	25	20	9	10%	31	33%	8	9%	26	20
	In FTEs								In FTEs							
	more	%	even	%	less	%	none	non response	more	%	even	%	less	%	none	non response
total	10	11%	30	32%	9	9%	25	21	10	11%	29	31%	8	9%	26	21

Table 27. Expectation of change in headcount (persons and FTEs) in 2014 compared to 2013 and 2016 to 2014 expressed in number of organizations and percentage (n=95).

Change in size of staff (realized and expected)						
year	growth (%)	even (%)	shrinkage (%)	net	type	Related to
2008	34	28	16	18%	this report	2013
2012	10	56	11	-1%	this report	2013
2013	0	0	0	0%	this report	2013
2014	10	30	9	1%	expected	2013
2016	10	33	9	1%	expected	2013
Change in size of FTEs (realized and expected)						
year	growth (%)	even (%)	shrinkage (%)	net	type	Related to
2008	38	20	19	19%	this report	2013
2012	10	44	14	-4%	this report	2013
2013	0	0	0	0%	this report	2013

2014	11	32	9	2%	expected	2013
2016	10	29	8	2%	expected	2013

Table 28. Reported and expected changes in numbers of employees and FTEs (n=93).

3.6 Quality systems

All organizations were asked whether they are certified in accordance with a legally recognised quality (management) system, other than the Dutch Archaeological Quality Standard. A quality system implies a minimum organization size and qualifications of staff. It is evident that organizations that engage in activities under permit will report they abide by the Dutch Archaeological Quality Standard.

2013	**No. of organizations**	**% of total**	**No. of employees**	**% of total**
Yes	8	7%	99	18%
No	105	93%	445	82%
total	**113**	**100%**	**544**	**100%**

Table 29. Total number of organizations with a legally recognised quality management system (n=113).

2013	**Fieldwork and research**	**Policy and advice**	**Public and conservation**	**Science and education**
Yes	6	5	4	3
No	82	68	72	39
total	**88**	**73**	**76**	**42**

Table 30. Use of quality management systems distributed to the activities executed by organizations (n=113).

2013				
n=			**yes**	**no**
48	O		**45**	**3**
2		State	1	1
8		Provinces	8	0
36		Municipalities	34	2
2		Universities	2	0
19	SO	Semi-government	**18**	**1**
46	P		**42**	**4**
21		Companies	18	3
25		Self-employed professionals	24	1
113	**total**		**105**	**8**

Table 31. Number of organizations per (sub)sector with a quality management system.

2013	
Quality management system	
ISO 9001	6
ISO 14001	1

ISO 17025	1
total	**8**

Table 32. Quality management system mentioned (n=113).

Only 7% of the organizations is certified for a quality management system like ISO 9001 affecting the workforce and headcount. The other mentioned 'quality systems' were SIKB 8001/8002 or membership of the museum Association. These are different in character, as are the National Coalition Digital Sustainability, National Data Seal of Approval and a national archaeology permit.

3.7 Solvency

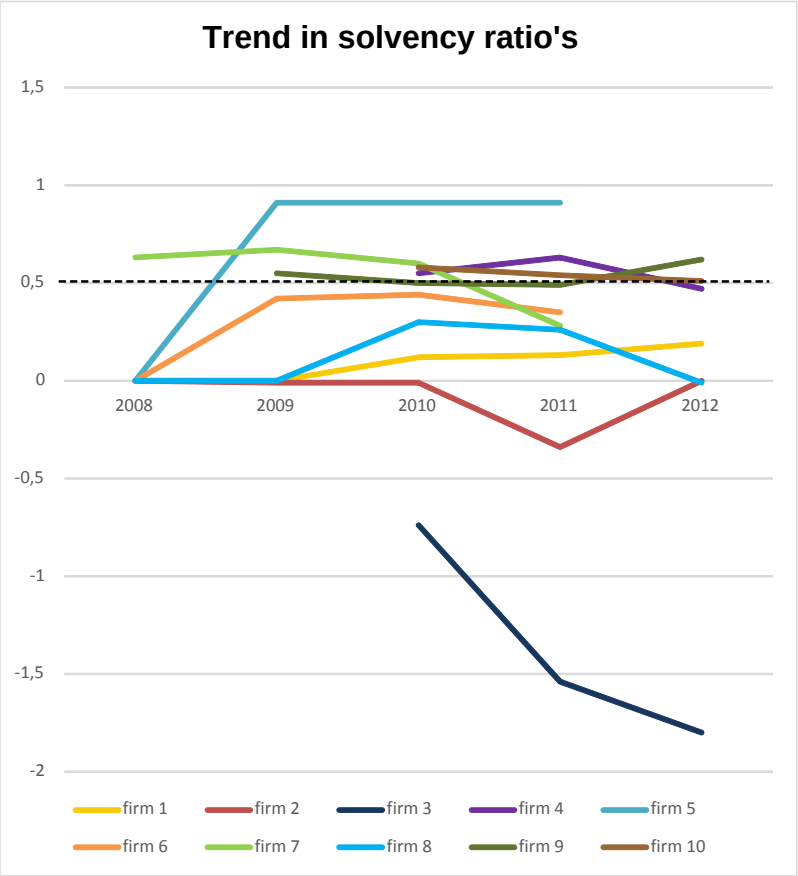


Figure 13. Trend in solvency ratios from 2008 to 2012 (source Chamber of Commerce). The ratio shows the extent to which companies are able to comply to their financial obligation.

To assess solvency, a sample of ten firms of varied size and a founding date between 1995 and 2008 was made out of 45 private companies (not self-employed). Of these companies, the standard solvency ratio for the period 2008-2012 was looked at (Shareholders 'Equity divided by Total Equity'). The ratio gives insight into the extent to which companies are able to meet their financial obligations. In general, a number of 0.5 is used as norm, meaning if the value of assets decreases by 50%, the company is still able to meet its obligations towards foreign capital providers. The minimum of the norm is between 0.25 and 0.4. Three

of the ten companies in 2012 have a ratio above the level of 0.5, one just below it. Six companies are at the minimum norm or below. For the majority of the firms, equity is clearly under pressure. One company is not solvent and is probably dependent on a parent company.

3.8 Business confidence

In the questionnaire, organizations were asked whether they expected growth or shrinkage of the number of employees and turnover. The information is found in Tables 26, 27 and 28. In addition, free space was offered to provide an explanation. A number of answers with regard to expectations, number of staff and development activities are highlighted.

Expectations with regard to number of staff:
Staff levels are sufficient for the work to be performed.
We are more than happy as long as we both can live on it!
Dependent on market, strategy of the company as a whole.
Remains the same, as appropriate to the tasks to be performed.
For now, the municipality uses a vacancy stop; currently no expansion of the formation.
Building up of a team.
Hoping that it remains the same. Discussion on core tasks has yet to take place. Currently in the midst of budget cuts. So it can always be less. It will certainly not be growing.
Stable development to slight growth of the organization
The incredibly poor market conditions, the extremely low prices, and the failed policy enforcement offer no prospects. Nevertheless, there is still some hope that here may be a better policy enforcement is still some improvement in might occur.
Slight increase in turnover as a result of possible market improvement and any failure or reduce competition.
Number remains practically stable, only the outflow of pensioners is not supplemented.
Number remains the same, task content more integral heritage

Expectations with respect to development activities:
The tasks will not change much.
Strategic use of available resources.
No bonuses.
As a non-profit organization we don't have a turnover.
Turnover will not increase, sooner reduce, as a result of price cuts in the sector and the fact that less research is recommended.
In particular, developments within the municipality (education/heritage education, new archaeological depot) and in addition, developments in the field of the quality management system and tasks of the municipality (enforcement, monitoring, quality assurance).
Retreat to core functions (legal and autonomous policy), shift of emphasis to education and public
Expectation of the revenue is not yet predictable.
Policy goes by, advice decreases by crisis and work on the basis of confidence (in stead of enforcement)

Then, the organizations were asked about their expectations with regard to the activities for the years 2014 and 2016. Strikingly, many organizations, broaden their activities and focus more on specialist support, education (from scientific research to heritage education) and public activities. Several answers were possible. In total 69 respondents answered the question.

2013 n=	
30	O
2	State
3	Provinces
24	Municipalities
1	Universities
10	SO
29	P
12	Companies
17	Self-employed professionals
69	

Distribution of respondents in table 33a and 33b (O=government, SO=semi-government, P=private companies).

2014 **Activity type**	**stops**	**decrease**	**even**	**increase**	**new**	**total no. times mentioned**
Archaeological advice / support	1.7%	22.4%	46.6%	27.6%	1.7%	58
Policy development	0.,0%	31.3%	31.3%	35.4%	2.1%	48
Policy implementation	2.2%	21.7%	47.8%	23.9%	4.3%	46
Policy enforcement	2.6%	15.4%	46.2%	30.8%	5.1%	39
Quality assurance	3.2%	16.1%	51.6%	25.8%	3.2%	31
Personal manager	16.7%	0.0%	50.0%	33.3%	0.0%	12
Project management / management	0.0%	44.1%	26.5%	26.5%	2.9%	34
Prospecting	4.2%	41.7%	33.3%	20.8%	0.0%	24
Excavation activities (permit holders)	6.9%	31.0%	37.9%	24.1%	0.0%	29
Archaeological guidance	7.1%	25.0%	39.3%	28.6%	0.0%	28
Technical support	5.9%	17.6%	58.8%	17.6%	0.0%	17
Specialist support	3.2%	25.8%	35.5%	29.0%	6.5%	31
Scientific research	3.8%	30.8%	19.2%	42.3%	3.8%	26
Education	4.0%	8.0%	32.0%	52.0%	4.0%	25
Heritage education	2.5%	12.5%	45.0%	37.5%	2.5%	40
Public activities	4.3%	21.3%	27.7%	42.6%	4.3%	47
Preservation /	0.0%	17.9%	35.7%	39.3%	7.1%	28

conservation						
Training courses	4.3%	13.0%	39.1%	34.8%	8.7%	23

Table 33a. Expected development of activities in 2014 (n=69).

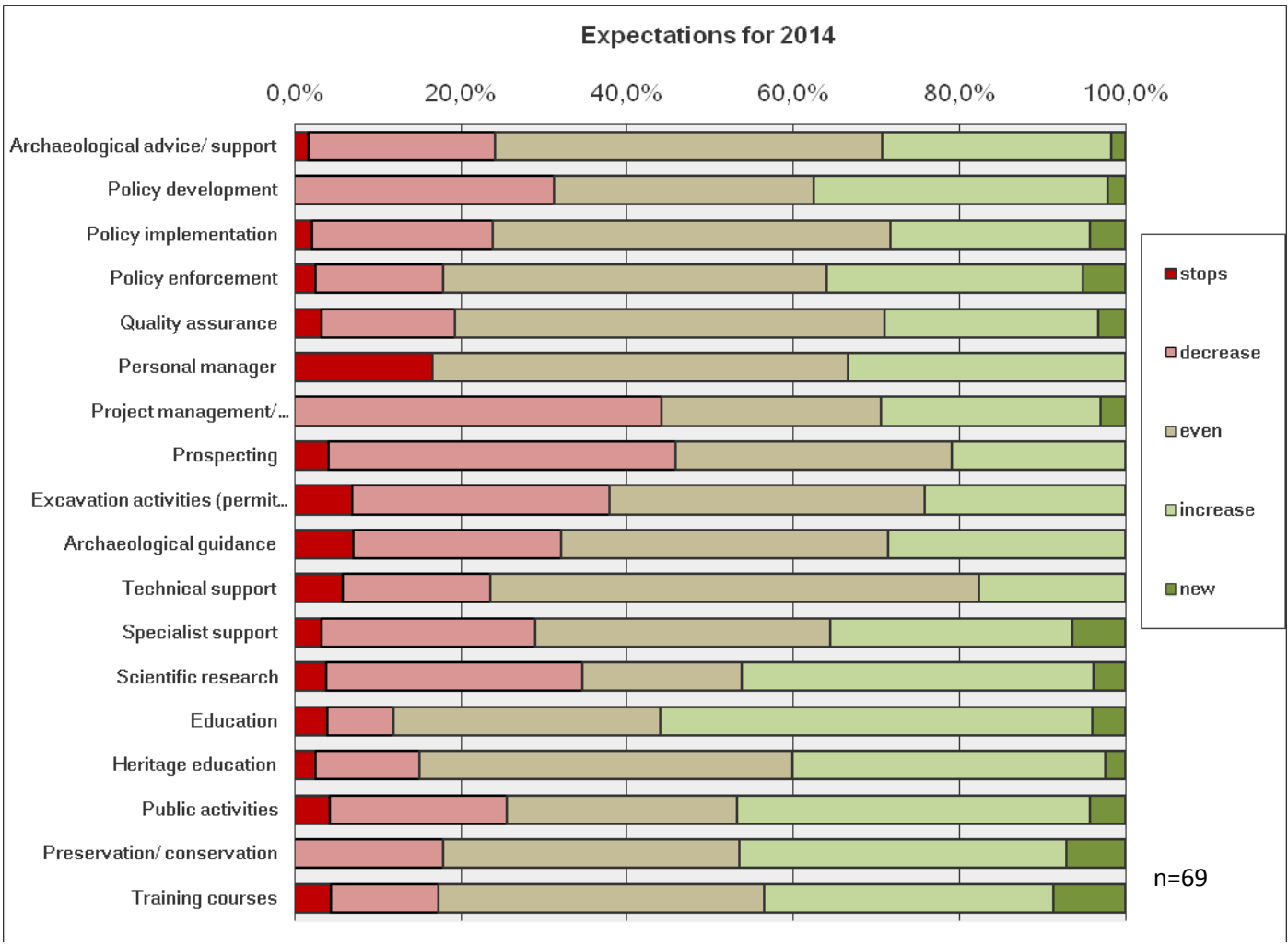


Figure 14. Expected development of activities in 2014 (n=69).

2016 Activity type	stops	decrease	even	increase	new	total no. times mentioned
Archaeological advice / support	1.8%	19.3%	45.6%	33.3%	0.0%	57
Policy development	0.0%	30.6%	42.9%	24.5%	2.0%	49
Policy implementation	0.0%	20.0%	60.0%	17.8%	2.2%	45
Policy enforcement	0.0%	25.0%	40.0%	32.5%	2.5%	40
Quality assurance	2.9%	17.6%	50.0%	26.5%	2.9%	34
Personal manager	9.1%	18.2%	45.5%	18.2%	9.1%	11
Project management / management	0.0%	23.3%	33.3%	43.3%	0.0%	30
Prospecting	0.0%	33.3%	37.5%	29.2%	0.0%	24
Excavation activities (permit holders)	3.8%	26.9%	46.2%	23.1%	0.0%	26
Archaeological guidance	3.7%	25.9%	44.4%	25.9%	0.0%	27
Technical support	0.0%	29.4%	35.3%	35.3%	0.0%	17
Specialist support	7.1%	21.4%	42.9%	25.0%	3.6%	28
Scientific research	7.7%	30.8%	38.5%	19.2%	3.8%	26
Education	4.3%	8.7%	52.2%	30.4%	4.3%	23
Heritage education	4.8%	9.5%	47.6%	35.7%	2.4%	42
Public activities	6.8%	15.9%	36.4%	38.6%	2.3%	44
Preservation / conservation	3.7%	18.5%	37.0%	37.0%	3.7%	27
Training courses	4.8%	4.8%	47.6%	38.1%	4.8%	21

Table 33b. Expected development of activities in 2016 (n=69).

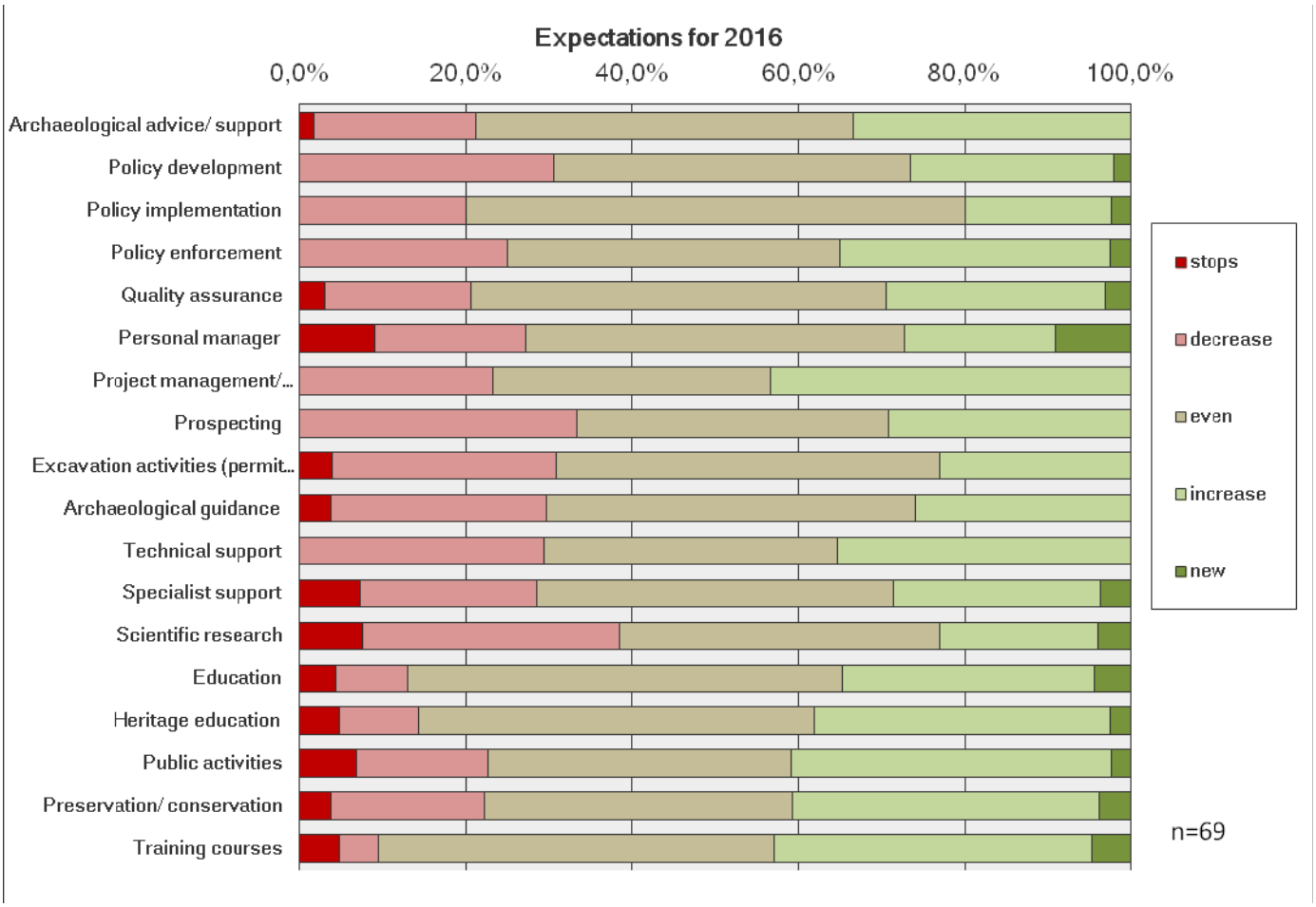


Figure 15. Expected development activities in 2016 mentioned by respondents (n=69).

4 People working in the archaeology sector

4.1 Introduction

Chapter 4 discusses the labour market at the level of persons with paid work in Dutch archaeology, to gain insight in the composition of the profession. Firstly, inflow and outflow of training will be presented. The courses themselves are covered in Chapter 6. Then, aspects of diversity such as gender, age, (partial) disability and country of origin are discussed. This information will be combined with education, job types and level of salary. The next chapter further explores posts and salaries.

4.2 Growth of the profession

In the Netherlands, archaeology can be studied at university or as applied science, at Saxion (university for applied sciences), *Universiteit Leiden* (UL, Leiden University), *Rijksuniversiteit Groningen* (RUG, University of Groningen), *Radboud Universiteit Nijmegen* (RU, Radboud University), *Universiteit van Amsterdam* (UvA, University of Amsterdam), and *Vrije Universiteit Amsterdam* (VU, VU University). Archaeology is grouped under the humanities (UvA), literature (RUG, VU and RU) or has its own faculty (UL). For more detail, see Table 34.

4.2.1 New entrants to the profession

Here, the influx of new archaeologists on the labour market is looked at. Education provides for a considerable number of persons employed in archaeology. Alternatives, such as geography are not taken into account.

Degree	Saxion	UL	RUG	RU	UvA	VU
Bachelor of Archaeology - HBO B	x					
Bachelor of Arts (of Archaeology) -BA		x	x		x	x
Master of Arts (of Archaeology) - MA and rMA		x	x	x	x	x
Master in Science (of Archaeology) - rMA		x				

Table 34. Degrees in archaeology accredited to institutions.

4.2.2 Supply from universities

The Bachelor's degree (BA) inflow is, in addition to the applied sciences (HBO), offered by universities with an archaeology department (Table 34). Ancient Studies and comparable programmes are excluded in this survey, even though these trainings could be combined with a major in archaeology. These studies deliver nationwide less than 10 students per year.

The Master (MA) selection is wider. The origin of the influx of students may be more than a BA level of archaeology. In addition students with the 4-year-old applied sciences (HBO B) training in archaeology also sign up for an MA in archaeology.
The influx of first-year students is shown in table 35. Annually, an average of between 200 and 220 students register in an archaeology course at B, BA and MA level. The number is fairly consistent over a period of five years.

	2009/2010	**2010/2011**	**2011/2012**	**2012/2013**	**2013/2014**
Archaeology					
HBO B	62	49	75	75	53
BA	131	114	115	102	111
MA and rMA	13	21	21	37	53
rMA/science	0	0	2	1	2
subtotal	206	184	213	215	219
Heritage studies					
MA	1	7	4	13	8
Art history and Archaeology					
MA		3	1		
total	**207**	**194**	**218**	**228**	**227**

Table 35. First year registrations in archaeology (bachelor and master) and heritage studies.

Table 36 shows the number of full-time students in university courses. Only the *Vrije Universiteit Amsterdam* has offered in the past a part-time study Bachelor and Master in archaeology. These were stopped as of the academic year 2012/2013.

year	**BA**		**MA**		**rMA**		**total**	**total**
	m	v	m	v	m	v	Full-time	Full-time and Part-time
2009/10	277	306	93	103	13	24	*816*	*849*
2010/11	272	315	87	113	11	27	*825*	*853*
2011/12	262	308	76	96	13	35	*790*	*819*
2012/13	236	269	82	111	22	44	*764*	*777*
2013/14	221	254	101	140	27	56	*799*	*808*

Table 36. Total number of registered full-time students (m/v) in academic archaeology.

The increase of the number of rMA students stands out (Table 36). An explanation may be that the chances of finding work in archaeology are reduced and students may therefore decide to study further. The total number of students in universities shows a slightly declining trend, which in 2013/2014 picks up again.

The number of part-time students in archaeology has decreased in the course of the years by policy changes in academic education (Table 37). Individuals, already part of the (general) workforce can no longer combine study and work.

year	BA		MA		total	% total no. of students
	m	v	m	v		
2009/10	10	15	3	5	*33*	*4%*
2010/11	7	13	6	2	*28*	*3%*
2011/12	7	10	6	6	*29*	*4%*
2012/13	3	2	6	2	*13*	*2%*
2013/14	5	0	2	2	*9*	*1%*

Table 37. Total number of registered male and female part-time students of archaeology (BA, MA)

Table 38a shows the outflow of students. These people are the young professionals that enter the labour market. They can choose from a variety of specializations (job perspectives), including a large number outside the Netherlands. The downward trend seen in the first-year students is not detectable here. This is partly the result of a delay, students generally finish three to four years after registration. More women than men study archaeology. The out-flux numbers are in a reasonable proportion to the in-flux numbers. The applied sciences degree (HBO) in archaeology started in 2007. The study lasts for four years, so the first students graduated only in 2011.

year	B			BA			MA			rMA			total outflow	
	m	f	*total*	m	f	*total*	m	f	*total*	m	f	*total*	Full-time	incl. part-time
2008/09	-	-	-	56	64	*120*	35	38	*73*	7	10	*17*	210	214
2009/10	-	-	-	44	60	*104*	33	44	*77*	3	6	*9*	190	199
2010/11	-	-	-	48	59	*107*	47	56	*103*	6	7	*13*	223	227
2011/12	2	4	*6*	60	75	*135*	32	48	*80*	3	14	*17*	238	250
2012/13	5	2	*7*	52	70	*122*	31	41	*72*	3	11	*14*	215	218
total	**7**	**6**	**13**	**260**	**328**	**588**	**178**	**227**	**405**	**22**	**48**	**70**	**1076**	**1108**

Table 38a. Total outflow of qualified male and female students of archaeology (HBO B, bachelor and master).

In addition, the outflow of part-time students is measured.

year	BA			MA			total outflow
	m	f	*total*	m	f	*total*	
2008/09	3	0	*3*	1	0	*1*	4
2009/10	3	1	*4*	2	3	*5*	9
2010/11	0	4	*4*	0	0	*0*	4
2011/12	1	6	*7*	4	1	*5*	12
2012/13	0	2	*2*	0	1	*1*	3
total	**7**	**13**	**20**	**7**	**5**	**12**	**32**

Table 38b. Total outflow of qualified male and female part-time students academic archaeology (BA and MA).

Since Leiden University has a Faculty of Archaeology, the return is clearly presented in annual reports. At the other universities these figures disappear in the faculty of Arts or the Humanities. In addition, Leiden has a relatively high number of students. Therefore, the return of Leiden is presented as a representative for the other universities where archaeology is taught. In Table 39 the student numbers enrolled are listed, compared to the number that also graduated, with other words: the success rate.[24]

Education	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011
Bachelor*	58%	69%	37%	46%	64%	-	-
Master**	-	-	60%	65%	54%	72%	64%

Table 39. Return of registration of archaeological training at the University of Leiden (BA and MA).
* Return of re-registration in 4 years
** 1-year master's degree in 2 years

4.3 Diversity

4.3.1 Gender balance

The gender balance within organizations focuses both on the employees as well as volunteers. There are slightly more men (58%) than women (42%) in the sector.

2013							
n=			M	%	F	%	total
41	**O**		**149**	**27%**	**114**	**20%**	**263**
2		State	39	7%	24	4%	63
5		Provinces	8	1%	9	2%	17
32		Municipalities	84	15%	61	11%	145
2		Universities	18	3%	20	4%	38
17	**SO**	Semi-government	**58**	**10%**	**43**	**8%**	**101**
39	**P**		**117**	**21%**	**79**	**14%**	**196**
15		Companies	106	19%	66	12%	172
24		Self-employed professionals	11	2%	13	2%	24
97	**total**		**324**	**58%**	**236**	**42%**	**560**

Table 40. Number of men and women employed in archaeology per (sub)sector (O=government, SO=semi-government, P=private companies) (n=97).

[24] http://media.leidenuniv.nl/legacy/kerncijfers-jaarverslag-2012.pdf

	2002-2003[25]	2007-2008[26]	2012-2013
Male	65%	59%	58%
Female	35%	41%	42%

Table 41. Ratio of men and women in archaeology in the last ten years (n=97).

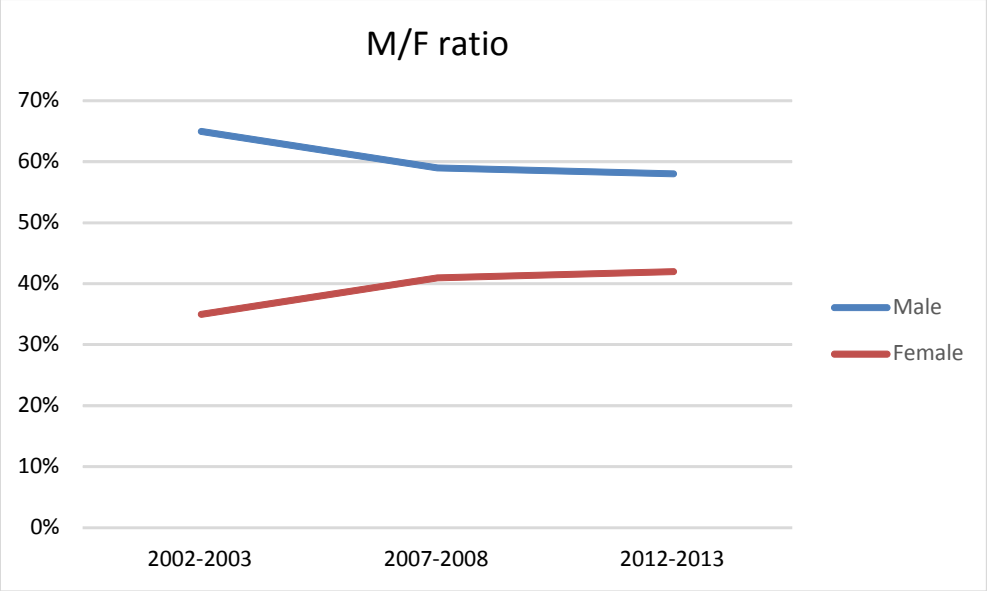


Figure 16. Ratio of men and women in archaeology over time (n=97).

There is a decrease of the number of men and an increase of the number of women employed in archaeology.

4.3.2 Age

The weighted average age of men is 46.1 years, while that of women 42.1 years. If these averages are broken down by age group, it is striking that the older generation is more male than female. The turning point is around 40 years. In the age group of 30-39, for the first time more women than men are employed in archaeology. Most of the volunteers fall in the 66+ category and concern pensioners.

	2012-2013
Male	46.1
Female	42.1

Table 42. Weighted average age.

[25] Waugh 2008, 39
[26] Waugh 2008, 39

	M	%	F	%	total
<20 year	1	0%	0	0%	1
20-29 year	23	4%	27	5%	50
30-39 year	83	15%	93	17%	176
40-49 year	88	16%	52	9%	140
50-59 year	91	16%	49	9%	140
60-66 year	28	5%	14	3%	42
>66 year	10	2%	1	0%	11
total	**324**	**58%**	**236**	**42%**	**560**

Table 43. Gender balance and age groups (n=97)

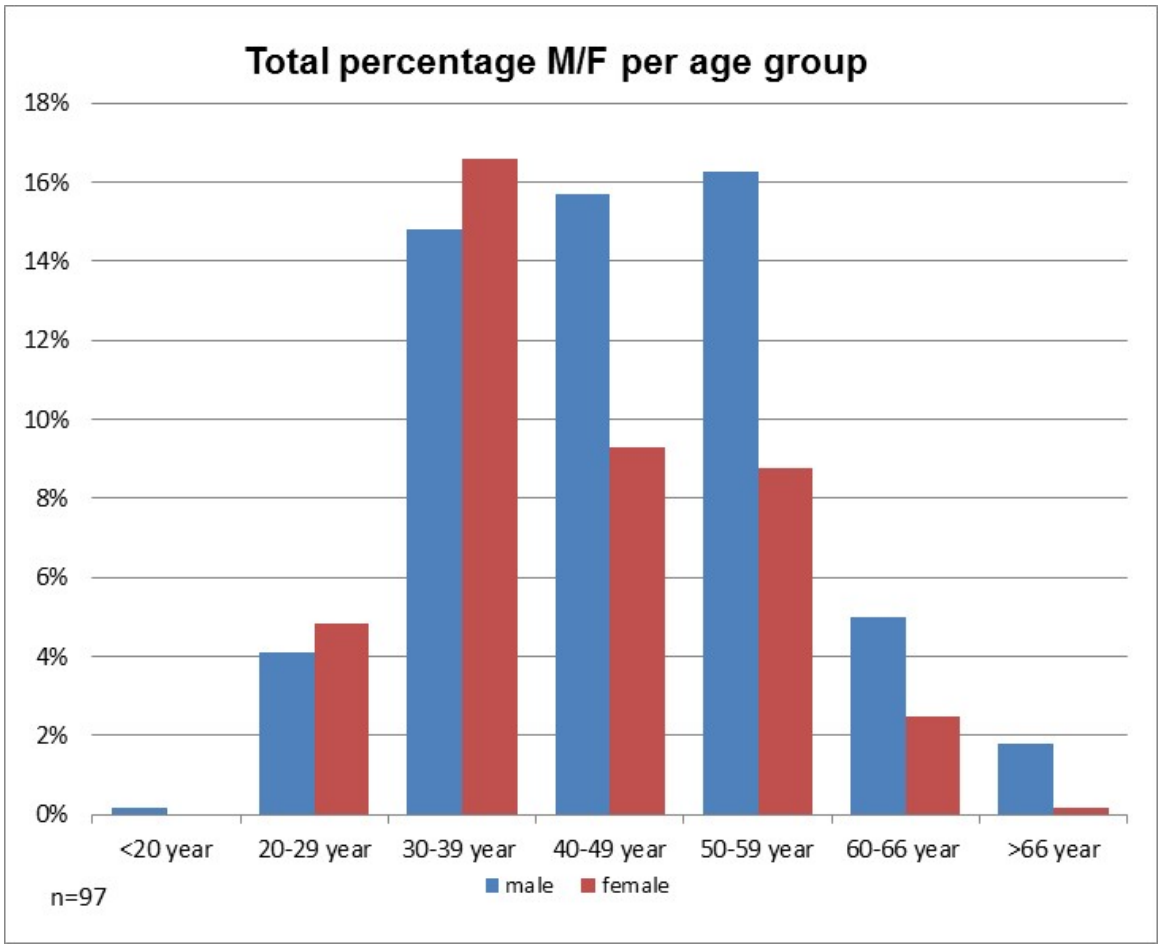


Figure 17. Gender balance and age groups.

		M	%	F	%	total
Unknown	2007-2008	26	52%	24	48%	**50**
<20 year	2007-2008	0	0%	0	0%	**0**
	2012-2013	1	100%	0	0%	**1**
20-29 year	2007-2008	23	70%	10	30%	**33**
	2012-2013	23	46%	27	54%	**50**
30-39 year	2007-2008	54	49%	56	51%	**110**
	2012-2013	83	47%	93	53%	**176**
40-49 year	2007-2008	69	76%	22	24%	**91**
	2012-2013	88	63%	52	37%	**140**
50-59 year	2007-2008	37	70%	16	30%	**53**
	2012-2013	91	65%	49	35%	**140**
60-66 year	2007-2008	9	82%	2	18%	**11**
	2012-2013	28	67%	14	33%	**42**
>66 year	2007-2008	0	0%	0	0%	**0**
	2012-2013	10	91%	1	9%	**11**

Table 44. Age and sex of employees archaeology in 2007-2008 and 2012-2013 (n=97).

In Table 44, the difference in age structure and m/f ratio during the previous[27] and current research are compared. An increase in the number of women is seen in the age group 40-49. On a whole, it can be concluded that not everyone continues to work in the sector. More women enter the profession and older men leave.

All the organizations were asked to state function, age, and gender of the employees. An overview is shown in table 45. Because not all questionnaires for this section were completed, we have less information than the male/female distribution. For the self-employed professionals a weighted number per function has been taken.

[27] Waugh 2008

n=	2013		Senior archae-ologists	Junior archae-ologist	Senior archae-ological specialist	Junior archae-ological specialist	Non-archae-ological specialist	Senior field technician	Junior field technician	Other (labourer, etc.)
40	O		**69**	**18**	**12**	**3**	**11**	**8**	**3**	**0**
2		State	11	0	6	1	2	2	1	0
4		Provinces	2	0	2	0	0	0	0	0
32		Municipalities	49	13	4	2	6	3	2	0
2		Universities	7	5	0	0	3	3	0	0
17	SO	Semi-government	**18**	**4**	**0**	**0**	**4**	**1**	**0**	**0**
37	P		**50**	**25**	**9**	**1**	**10**	**9**	**7**	**5**
15		Companies	48	24	7	0	9	9	7	4
22		Self-employed	2	1	2	1	1	0	0	1
94	**total**		**137**	**47**	**21**	**4**	**25**	**18**	**10**	**5**

n=	2013		Junior prospector	Senior prospector	Junior advisor	Senior advisor	Junior policy officer	Senior policy officer	Scientific staff	Educators	Support staff
40	O		**0**	**3**	**13**	**15**	**3**	**16**	**36**	**1**	**38**
2		State	0	0	11	5	1	1	13	0	11
4		Provinces	0	0	1	0	2	5	0	0	2
32		Municipalities	0	3	1	10	0	10	6	1	22
2		Universities	0	0	0	0	0	0	17	0	3
17	SO	Semi-government	**0**	**0**	**1**	**5**	**3**	**6**	**9**	**6**	**21**
37	P		**5**	**11**	**1**	**13**	**2**	**2**	**4**	**5**	**34**
15		Companies	5	9	1	7	2	0	3	3	33
22		Self-employed	0	2	0	6	0	2	1	2	1
94	**total**		**5**	**14**	**15**	**33**	**8**	**24**	**49**	**12**	**93**

Table 45. Number of persons per job per (sub)sector (O= government, SO= semi-government, P= private companies) (n=94).

In combination with Table 46 this information offers insight in the distribution of functional groups per age group and per (sub)sector. For instance, a lot of men in senior positions work for the government.

	2013																
			<20 year		20-29 year		30-39 year		40-49 year		50-59 year		60-66 year		>66 year		total
n=			F	M	F	M	F	M	F	M	F	M	F	M	F	M	
41	**O**		**0**	**1**	**13**	**9**	**35**	**28**	**24**	**38**	**35**	**60**	**7**	**13**	**0**	**0**	**263**
2		State	0	0	0	1	3	5	8	8	11	19	2	6	0	0	63
5		Provinces	0	0	0	0	5	1	1	5	2	2	1	0	0	0	17
32		Municipalities	0	1	7	6	21	18	14	20	16	34	3	5	0	0	145
2		Universities	0	0	6	2	6	4	1	5	6	5	1	2	0	0	38
17	**SO**	Semi-government	**0**	**0**	**8**	**2**	**17**	**10**	**7**	**11**	**5**	**15**	**6**	**11**	**0**	**9**	**101**
39	**P**		**0**	**0**	**6**	**12**	**41**	**45**	**21**	**39**	**9**	**16**	**1**	**4**	**1**	**1**	**196**
15		Companies	0	0	6	12	38	40	13	34	7	16	1	3	1	1	172
24		Self-employed professionals	0	0	0	0	3	5	8	5	2	0	0	1	0	0	24
97	**total**		**0**	**1**	**27**	**23**	**93**	**83**	**52**	**88**	**49**	**91**	**14**	**28**	**1**	**10**	**560**

Table 46. Age and sex of employees to (sub)sector (O=government, SO=semi-government, P=private companies) (n=97).

4.3.3 Disability status

In the questionnaires, organizations were asked whether their employees fall under a formal disability status (Wia, Wajong etc.) and if so, how many employees (and FTEs) this applies to. Of the previous years, there are no data known. Of the 519 persons employed in the year 2013, 26 people have an arrangement (5%). Of those 26 employees, 24 (92%) work with the government, especially in municipalities.

n=	2013		persons	% of total no. of employees	FTEs	% of all FTEs
49	**O**		**24**	**4.6%**	**17.5**	**4.1%**
3		State	0	0.0%	0	0.0%
8		Provinces	3	0.6%	2.8	0.7%
36		Municipalities	21	4.0%	14.7	3.5%
2		Universities	0	0.0%	0	0.0%
19	**SO**	Semi-government	**1**	**0.2%**	**0.5**	**0.1%**
46	**P**		**1**	**0.2%**	**0.6**	**0.1%**
21		Companies	1	0.2%	0.6	0.1%
25		Self-employed professionals	0	0.0%	0	0.0%
114	**total**		**26**	**5.0%**	**18.6**	**4.4%**
	total No. of persons/FTEs		**519**	**-**	**424.8**	**-**

Table 47. Number of employees with a disability status per (sub)sector (O=government, SO=semi-government, P=private companies) (n=114).

4.3.4 Country of origin

Organization were asked to fill in the country of origin, i.e. other than the Netherlands, of employees. Almost all people employed in archaeology come from the Netherlands (92,3%). Of the foreign countries, Belgium is the most represented.

	2007-2008[28]		2012-2013	
The Netherlands	476	95.4%	479	92.3%
Other EU countries				
Belgium	5	1.0%	16	3.1%
United Kingdom	5	1.0%	5	1.0%
Germany	3	0.6%	4	0.8%
Poland	1	0.2%		
Italy	1	0.2%	2	0.4%
Austria	1	0.2%		
Greece			2	0.4%
Spain			1	0.2%
Croatia			1	0.2%
Denmark			1	0.2%
Sweden			1	0.2%
Non EU countries				
Serbia	1	0.2%		
Switzerland	1	0.2%		
Other countries				
Canada		0.0%	1	0.2%
Afghanistan			1	0.2%
Iraq	1	0.2%		
Korea	1	0.2%		
Mexico	1	0.2%		
Peru	1	0.2%	1	0.2%
Japan	1	0.2%		
Morocco			2	0.4%
Surinam			1	0.2%
Curacao			1	0.2%
total	**499**		**519**	

Table 48. Country of origin of archaeological employees (n=114).

Table 49 indicates in which (sub)sector employees from other countries work. They are limited in number and are spread by the sector as a whole.

[28] Waugh 2008,42.

2013			
n=			**persons**
49	O		**18**
3		State	0
8		Provinces	3
36		Municipalities	9
2		Universities	6
19	SO	Semi-government	**4**
46	P		**18**
21		Companies	17
25		Self-employed	1
114	**total**		**40**

Table 49. Number of employees from other countries than the Netherlands, by (sub)sector (O=government, SO=semi-government, P=private companies) (n=114).

4.4 Staff qualifications

In this section, staff qualifications, as measured by education, are brought to the screen (Tables 50 and 51). Furthermore, salary has been related to the level of education (Table 52a) and starting salary to function (Table 52b). People are, on average, highly educated (85%), but earn a modest salary just above the national average.

2013						
qualifications	**archaeology**		**other discipline**		**total**	**% of all qualifications**
PhD	16	80%	4	20%	20	11%
Doctoral/MA	106	85%	19	15%	125	68%
Academic BA	6	55%	5	45%	11	6%
Applied sciences MA	2	22%	7	78%	9	5%
Applied sciences BA	3	43%	4	57%	7	4%
MBO	0	0%	5	100%	5	3%
Other	1	17%	5	83%	6	3%
total	**134**	**73%**	**49**	**27%**	**183**	**100%**

Table 50. Highest education of employees (n=70).

qualifications	2007-2008[29]		2012-2013	
PhD	122	43%	20	11%
Doctoral/MA	141	50%	125	68%
Academic BA	2	1%	11	6%
Applied sciences MA	10	4%	9	5%
Applied sciences ba			7	4%
MBO			5	3%
Other	7	2%	6	3%
total	**282**	**100%**	**183**	**100%**

Table 51. Level of education over a number of years (n=70).

2013		
Level	**average salary in €**	**average salary self-employed prof. in €**
PhD	44,380	30,417
Other discipline	46,768	45,000
Doctoral	43,544	38,438
Other discipline	41,906	-
Academic MA	42,555	34,688
Other discipline	38,234	31,667
Academic BA	41,731	20,000
Other discipline	41,914	-
Applied sciences MA	37,500	-
Other discipline	39,671	20,000
Applied sciences BA	36,111	-
Other discipline	40,341	-
MBO	-	-
Other discipline	38,000	-
Other	45,000	-
Other discipline	35,025	25,000
total	**40,845**	**32,708**

Table 52a. Weighted average gross salary / gross income before tax by educational level (n=70).

For self-employed professionals, converting to full time equivalents may be imprecise (Tables, 52a and b is). Many self-employed persons have more than one function (19 self-employed persons in total 31 functions), it seems that the income is indicated per function. In total, then, one self-employed with two or more functions can get to a full-time gross income before tax of around to € 45,000. For comparison: the national gross average income for the year 2013 amounts to €32,500.[30] Of earlier years no data are available.

[29] Waugh 2008, 43.

[30] http://www.rijksoverheid.nl/onderwerpen/overheidsfinancien/vraag-en-antwoord/wat-is-het-bruto-modaal-inkomen.html

Post profile	av. gross salary	av. gross starting salary	av. gross salary self employed
Senior archaeologist	47,179	43,875	30,000
Junior archaeologist	33,462	29,167	-
Senior archaeological specialist	36,667	37,500	25,000
Non-archaeological specialist	40,000	35,000	20,000
Senior field technician	45,000	30,000	20,000
Junior field technician	30,000	27,500	-
Other (labourer etc.)	38,333	33,333	25,000
Junior prospector	28,333	31,667	-
Senior prospector	39,000	40,000	45,000
Junior advisor	35,000	31,000	-
Senior advisor	47,500	41,111	41,250
Junior policy officer	33,333	31,250	-
Senior policy officer	48,636	42,727	37,500
Scientific staff	55,000	40,000	20,000
Educators	38,750	36,250	20,000
Support staff	31,765	30,385	20,000

Table 52b. Weighted average gross salary /gross income before taxes per function in comparison with the starting salary (n=75). The function 'junior archaeological specialist' is not included because it involved only one person.

4.5 Volunteers

The questionnaires are inconsistently filled in relation to volunteers. The age structure and the male/female ratio remain unclear. However, volunteers are often 66+ (pensioners).

2013			
n=			**Volunteers**
40	O		**224**
2 4 32 2		State Provinces Municipalities Universities	0 0 224 0
17	SO	Semi-government	**143**
15	P		**40**
15 0		Companies Self-employed professionals	40 0
72	**total**		**407**

Table 53. Number of volunteers per (sub)sector (O=government, SO=semi-government, P=private companies) (n=72).

5 Jobs

5.1 Introduction

This section deals with jobs in archaeology. The information is ordered by function type. There are 17 posts defined in which a relationship has been established with the actors stated in the *Kwaliteitsnorm Nederlandse Archeologie* (KNA, Dutch Archaeological Quality Standard for Archaeology).

2013		
Posts	**No.**	**%**
Senior archaeologist	137	26%
Junior archaeologist	47	9%
Senior archaeological specialist	21	4%
Non-archaeological specialist	4	1%
Senior field technician	25	5%
Junior field technician	18	3%
Other (labourer etc.)	10	2%
Junior prospector	5	1%
Senior prospector	5	1%
Junior advisor	14	3%
Senior advisor	15	3%
Junior policy officer	32	6%
Senior policy officer	8	2%
Scientific staff	24	5%
Educators	49	9%
Support staff	12	2%
Senior archaeologist	93	18%
total	**519**	**100%**

Table 54. Number of individuals per post (n=93).

In this study, a different format is selected in relation to the previous survey [31] and therefore it is not possible to provide an historical perspective. Notable in Table 54, is the high number of senior archaeologists, they make more than a quarter of the population.

5.2 Number of posts per (sub)sector

In this section the distribution of various posts to a (sub)sector is looked at. This relation provides insight into the distribution of posts as well as the distribution of senior and junior positions. There is a lot of 'veteran' in the government and the universities.

[31] Waugh 2008

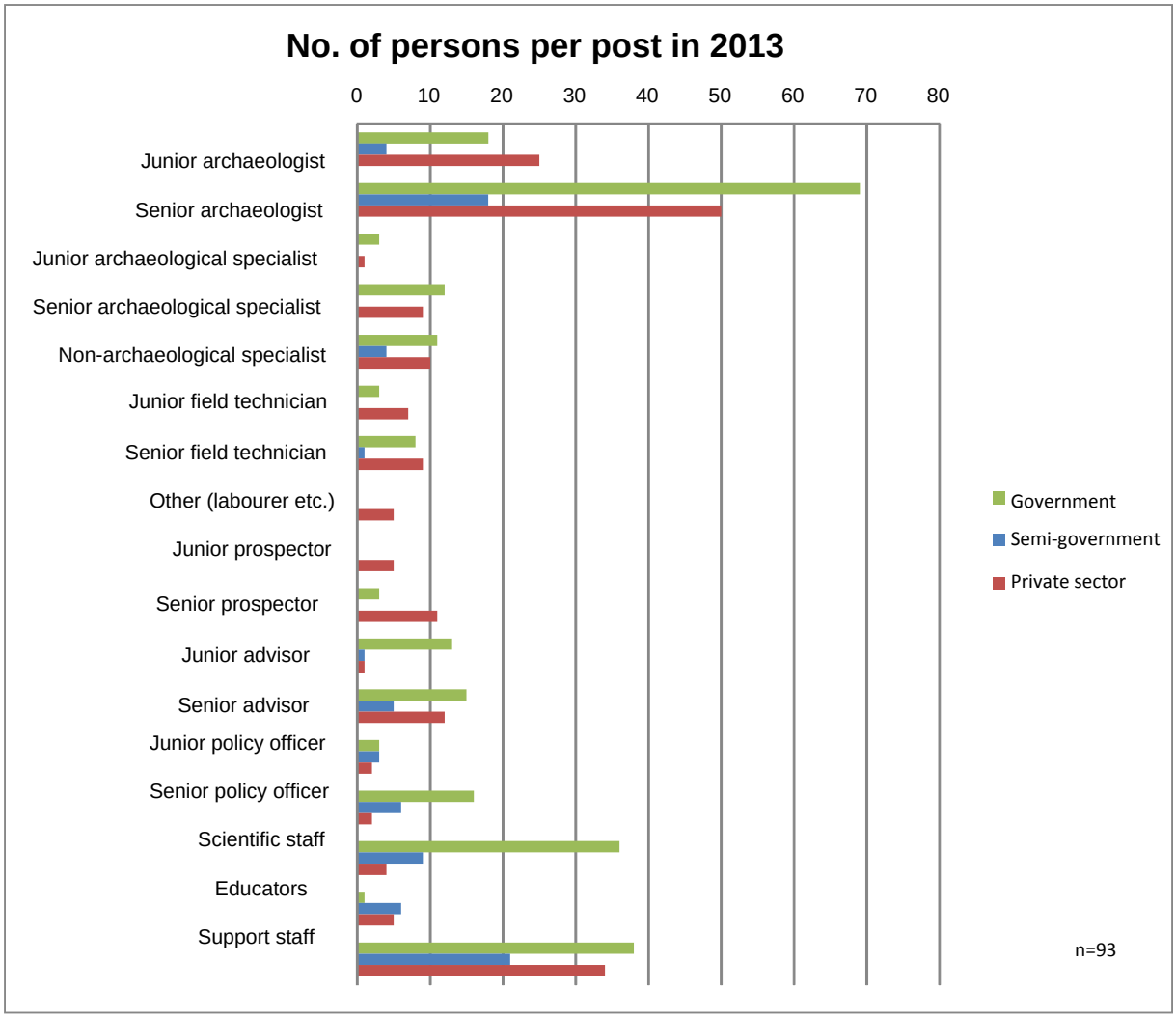


Figure 18. Number of individuals per post per (sub)sector (n=93).

5.3 Salary

Figure 19 shows an even distribution of salaries in the sector. There is a broad basis, with a few outliers at the top. The 8 respondents who indicated to earn less than € 20,000 per year, all came from the (sub)sector of the self-employed professionals. The salary of employees is calculated on gross salary (excluding employer's charges). For self-employed professionals income has been calculated on profit before taxes.

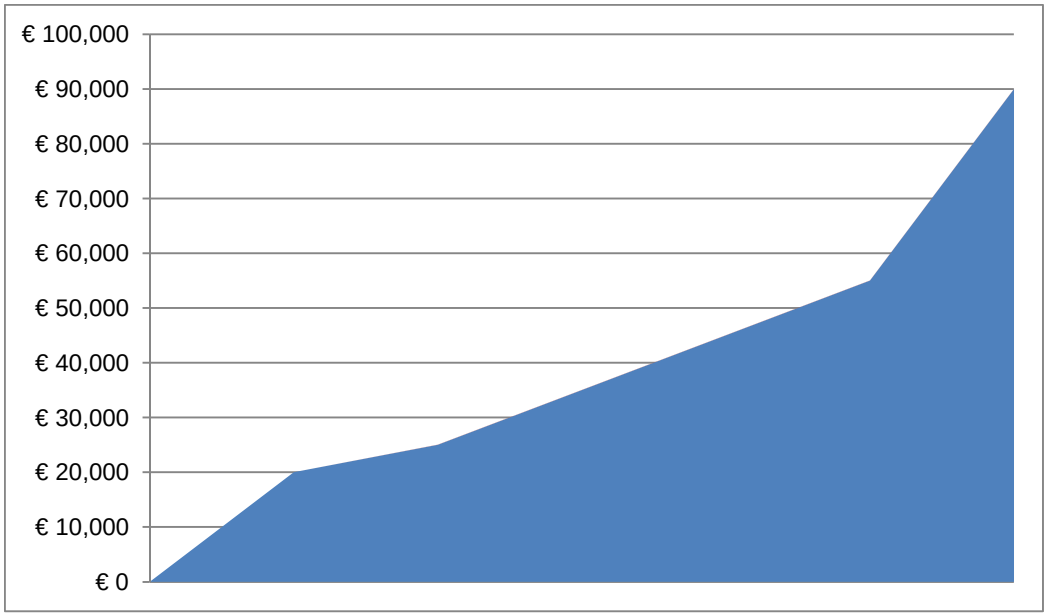


Figure 19. Graph after Pen's parade: on the horizontal axis, every person is lined up from the poorest to the richest (n=75), while the vertical axis shows the level of income per capita. In this graph the income equals the average, full-time gross annual salary in archaeology in 2013.

5.3.1 Average salary in the Netherlands

Based on the respondents, archaeologists earn a weighted average gross annual salary of €39,424, the meridian is €39,600. The average salary of a self-employed professional was €31,129. Of the 31 respondents eight said to earn less than €20,000. To gain insight in these differences, table 55b was made specifically for self-employed professionals.

salary spread (gGFT) in 2013	**€**
lower 10% earns less than	30,000
lower 25% earns less than	31,765
meridian	39,600
upper 25% earns more than	47,179
upper 10% earns more than	48,636
average	39,424

Table 55a. Distribution of income on the basis of the average full-time gross salary (n=75).

salary spread (gGFT) for self-employed professionals in 2013	€
10% earns less than	20,000
25% earns less than	20,000
meridian	26,563
25% earns more than	41,250
10% earns more than	41,250
average	31,129

Table 55b. Self-employed professionals. Distribution of income on the basis of average earnings (full-time) before taxes (n=31).

In Table 55a, and b, the weighted average salaries are used that were already addressed in Chapter 4. Respondents were bound to our chosen categories in the questionnaire. The calculations are used to produce a salary distribution for the sector as a whole. The figures are traced back to full-time salaries as much as possible so that they can be compared.

The meridian is located in the middle of the observations taken, 50% is higher, and 50% lower. For the calculation of the weighted average (per post) of salaries per function, the part-time salaries are converted to full-time equivalents.

Gross salary in €	2012-2013
average full-time salary in archaeology	€38,941
average full-time salary in the Netherlands*	€35,800
meridian full-time salary in archaeology	€39,424
meridian full-time salary in the Netherlands**	€32,500

Table 56. Full-time salaries in archaeology and for the working population in general.
*for 2012 for the working population in general.
**pertains to the estimated gross average income.

The Dutch gross average income in the year 2013 amounts to **€**32,500.
Table 57 shows a score per (sub)sector instead of a weighted average for each function. This way, the difference in salary for the various (sub)sectors has been made visible.

	10% earns less than	25% earns less than	meridian	25% earns more than	10% earns more than	average	No. of organizations
State	45,000	45,000	60,000	60,000	60,000	55,714	14
Provinces	25,000	25,000	29,000	53,000	55,000	35,000	8
Municipalities	20.227	22,273	33,333	54,091	58,929	38,444	45
Universities	n/a	n/a	n/a	n/a	n/a	n/a	0
Semi-government	23,000	24,333	53,333	60,000	60,000	46,071	28
Companies	21,056	23,778	41,071	51,889	56,375	36,923	39
Self-employed	20,000	20,000	29,167	49,000	59,993	31,129	31
total							165

Table 57. Gross income distribution by (sub)sector within archaeology in euros.

Table 58 shows the weighted average to function. The category > **€**60,000 gives a slightly distorted picture because it is considered the category of choice to **€**60,000. The average is therefore distorted slightly downward. The 'junior archaeological specialist' was only one person, the salary for this position will not be elaborated on further.

salary spread (gGFT)	10% earns less than	25% earns less than	meridian	25% earns more than	10% % earns more than	average	No. of persons
Senior archaeologist	25,000	35,833	44,167	53,333	59,000	47,179	39
Junior archaeologist	25,000	25,000	39,167	44,000	52,000	33,462	13
Senior archaeological specialist	20,000	21,875	35,000	56,875	60,000	36,667	6
Non-archaeological specialist	20,000	35,000	40,000	45,000	60,000	40,000	4
Senior field technician	35,000	35,000	45,000	55,000	55,000	45,000	2
Junior field technician	25,000	25,000	31,667	45,000	45,000	30,000	4
Other (labourer etc.)	35,000	35,000	37,500	45,000	45,000	38,333	3
Junior prospector	25,000	25,000	27,500	35,000	35,000	38,333	3
Senior prospector	25,000	27,500	36,000	45,000	45,000	39,000	5
Junior advisor	25,000	25,000	30,000	55,000	55,000	35,000	4
Senior advisor	25,000	36,250	42,500	60,000	60,000	47,500	10
Junior policy officer	20,000	20,000	25,000	55,000	55,000	33,333	3
Senior policy officer	35,000	36,875	43,750	58,750	60,000	48,636	11
Scientific staff	45,000	46,250	57,500	60,000	60,000	55,000	5
Educators	20,000	20,000	28,333	45,000	45,000	38,750	4
Support staff	20,000	28,214	34,285	42,500	54,750	31,735	17

Table 58. Weighted-average gross salary per function group in euros (n=89).

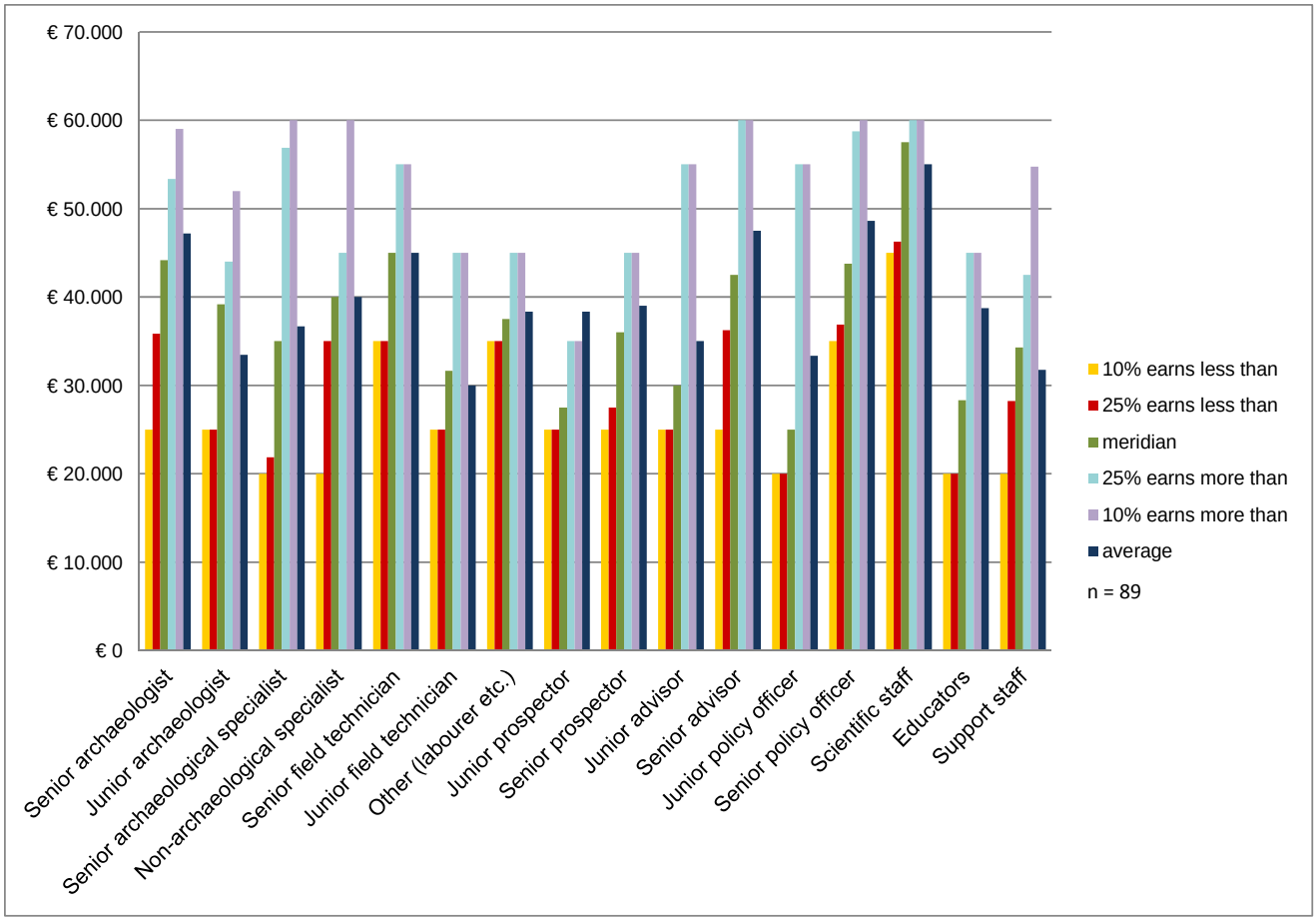


Figure 20. Spread of weighted average gross salary per post.

Table 59 shows that archaeologists, on average, earn slightly more money than the average Dutch person.

The Netherlands average in 2012	**35,800**
Employee in private company	33,900
Civil servant	43,900
Director-major shareholder	64,500
Self-employed professional	36,700
Other	15,000
total no. of workers	7,823,000
Archaeology average in 2013	**38,941**
Senior archaeologist	47,179
Junior archaeologist	33,462
Senior archaeological specialist	36,667
Non-archaeological specialist	40,000
Senior field technician	45,000
Junior field technician	30,000
Other (labourer etc.)	38,333
Junior prospector	38,333
Senior prospector	39,000
Junior advisor	35,000
Senior advisor	47,500
Junior policy officer	33,333
Senior policy officer	48,636
Scientific staff	55,000
Educators	38,750
Support staff	31,735
Calculated for the total number of people employed on the basis of response	133

Table 59. Weighted average gross income in euro for the main categories of professions (CBS, 2012) in comparison to the archaeological post profiles (n=89).

5.3.2 Earnings by gender

2013							
Full-time	lowest 10%	lower 25%	meridian	higher 25%	highest 10%	average	No.
m	30,033	40,168	47,179	51,663	57,500	43,275	135
f	30,033	36,869	40,000	47,340	51,818	41,375	83

Part-time	lowest 10%	lower 25%	meridian	higher 25%	highest 10%	average	No.
m	30,883	30,663	39,500	43,590	51,663	40,644	42
f	30,049	34,045	38,750	43,090	57,500	40,721	93

Table 60. Full-time and part-time salaries of men and women in employment (n=56).

Table 60 shows that women earn less than men, both in part-time and full-time jobs. The gap is smaller in part-time than full-time positions. The data provide no insight whether

remuneration differs for each specific function (same function-different salary). It appears from table 66 that women work more often in part-time and junior positions.

5.3.3 Salary scales

In the archaeological sector is, the authorities make use of salary scales, in accordance with the various collective agreements. Companies may use their own schemes and when hiring temporary employees, the salary scales of the temporary agency work sector may apply. The salary systems vary and therefore the (sub)sectors cannot be compared.

5.4 Employee rights and benefits

All public authorities are required to have a collective labour agreement, in which the rights and duties of employer and employee are defined (38 respondents). In this (sub)sector, this will also apply to the non-respondents. In the semi-government there is more variation, 13 respondents from this group handle a collective agreement. Only two organizations of the private sector indicates a collective labour agreement and one respondent indicates handling a private scheme.

2013	
	No.
unknown	20
no	15
yes	54
total	**89**

Table 61. Number of organizations with a collective labour agreement (n=69).

Secondary employment conditions were not surveyed. In Dutch legislation, regulations exist concerning, for example, pension, and (parental)leave, also a contribution of 8% holiday pay is normal and there is a statutory minimum number of holidays (4 times the number of hours per week).[32]

[32] http://www.rijksoverheid.nl/onderwerpen/verlof-en-vakantie

5.5 Job security

Organizations were asked for the length of the contracts of employment and duration of employment.

5.5.1 Contracts

In particular, the private sector makes use of 0-hours contracts and work on call contracts. The outsourcing of work to self-employed professionals, is seen equally in municipalities, universities and companies. In absolute terms, companies have the majority of fixed time contracts, but in percentage terms, this is less than, for example, in the semi-government.

2013	Fixed time		Tenured		Total no. employed	
	persons	FTEs	persons	FTEs	persons	FTEs
State	0	0	60	54.5	60	54.5
Provinces	1	0.8	12	10.4	13	11.2
Municipalities	17	14.,8	90	78.7	107	93.5
Universities	14	11	23	17.8	37	28.8
Semi-government	19	14.6	34	26.8	53	41.4
Companies	20	17.1	107	100	127	117.1
total	**71**	**58.3**	**326**	**288.2**	**397**	**346.5**

2013	Work on call contract/ 0-hours contract		Outsourced/self employed professionals		Total no. non employed	
	persons	FTEs	persons	FTEs	persons	FTEs
State	0	0	0	0	0	0
Provinces	0	0	0	0	0	0
Municipalities	1	1	10	2.9	11	3.9
Universities	0	0	10	10	10	10
Semi-government	0	0	2	0.4	2	0.4
Companies	22	8.5	16	9.2	38	17.7
total	**23**	**9.5**	**38**	**22.5**	**61**	**32**

Table 62. Number of employees and FTEs to contract type and (sub)sector (n=59).

5.5.2 Length of employment to date

Table 63 shows the average number of years in service. For self-employed professionals, the number of years working as an independent person were counted. Many archaeologists have been in service for a long period of time.

2013	
duration	**No. of persons**
< 1 year	10
1-2 year	17
2-5 year	58
6-10 year	154
11-15 year	208
16-20 year	30
> 20 year	43
total	**520**

Table 63. Average duration of years in service or working self-employed professionals and no. of people (n=89).

Archaeologists stay in service for a long period of time, especially when working for the government. This is partly explained by the fact that development of the free-market is rather new.

2013		
n=		**average total**
2	State	19.6
4	Provinces	10.2
32	Municipalities	12.2
1	Universities	20
14	Semi-government	9.3
14	Companies	9.8
22	Self-employed professionals	5.1
89	**total**	**9.9**

Table 64. Average number of years of service by (sub)sector (n=89). The number of filled-in functions related to self-employed professionals are converted to numbers of persons. In addition, rounding differences exist between the tables with the number of employees (filled in more often) and the amount of people for which the average number of years of service is completed.

Table 65 offers insight in the variety of years in service concerning senior and junior posts and of the duration per (sub)sector. Strikingly, junior-posts have a high number of years of service with the State. A junior worker does not automatically become a senior after a certain amount of time.

2013	Senior archaeologist	Senior archaeological specialist	Senior field technician	Senior prospector	Senior advisor	Senior policy officer	Average total
State	14	21	27.5	0	22.5	17.5	20.5
Provinces	12.5	10	0	0	0	13.3	11.9
Municipalities	12.1	13.3	10	9	8.1	11.6	10.7
Universities	20	0	35	0	0	0	27.5
Semi-government	8.9	0	0	0	4.5	10.5	8.0
Companies	9.9	13	8.5	9	5.5	6	8.7
Self-employed professionals	4.3	4.3	20	2	4.4	3.3	6.4
total	**9.5**	**11.0**	**20.0**	**6.9**	**7.5**	**9.0**	**10.7**

2013	Junior archaeologist	Junior archaeological specialist	Junior field technician	Junior prospector	Junior advisor	Junior policy officer	Average total
State	0	17.7	27.5	0	16	27.5	22.2
Provinces	0	0	0	0	2	10	6.0
Municipalities	6.8	12	12	0	2	0	8.2
Universities	0	0	0	0	0	0	0,0
Semi-government	4.3	0	0	0	0	2	3.2
Companies	4	0	9	3.5	0	1.3	4.5
Self-employed professional	5.7	2	0	3	3	1	2.9
total	**5.7**	**8.3**	**12.0**	**3.2**	**4.3**	**9.0**	**7.1**

2013	Non-archaeological specialist	Other (labourer etc.)	Scientific staff	Educators	Support staff	Average total
State	10	0	10.5	0	24	14.8
Provinces	0	0	0	0	13.5	13.5
Municipalities	13.5	0	16	20	11.7	15.3
Universities	0	0	15	0	10	12.5
Semi-government	0	0	25	7.5	11.9	14.8
Companies	13	25	20	6	13	15.4
Self-employed professionals	4.5	6	4.5	4.7	9.3	5.8
total	**10.4**	**13.4**	**13.9**	**12.0**	**11.9**	**12.3**

Table 65. Average number of years of service per post and (sub)sector (n=89).

5.6 Full-time and part-time work

Table 66 presents the gender balance by contract type and position. The m/f ratio has been adjusted for the difference in numbers (42% women compared to 58% of men), so that a better picture of the actual ratio m/f occurs. The results show that fewer women work in senior positions, and they have more often part-time contracts (see also Table 60).

2013	No. of m/f working in senior positions					Corrected after ratio m/f				Ratio after correction	
	Full-time		Part-time		Part-time in FTEs	persons full-time		Persons part-time		Full-time	Part-time
m	84	46%	40	22%	30,7	145	76%	69	51%	45%	21%
f	19	10%	38	21%	29,6	45	24%	66	49%	14%	20%
	103	**57%**	**78**	**43%**		**190**		**134**			

2013	No. of m/f working in junior positions					Corrected after ratio m/f				Ratio after correction	
	Full-time		Part-time		Part-time in FTEs	persons full-time		Persons part-time		Full-time	Part-time
m	22	29%	14	19%	11,6	38	57%	24	45%	32%	20%
f	12	16%	17	23%	13	29	43%	29	55%	24%	24%
	34	**45%**	**41**	**55%**		**67**		**53**			

2013	No. of m/f working in other positions					Corrected after ratio m/f				Ratio after correction	
	Full-time		Part-time		Part-time in FTEs	persons full-time		Persons part-time		Full-time	Part-time
m	29	27%	29	27%	20,6	50	66%	50	43%	26%	26%
f	11	10%	38	36%	25	26	34%	66	57%	14%	34%
	40	**37%**	**67**	**63%**		**76**		**116**			

Table 66. Distribution of number of full-time/part-time employees by sex and function (n=56).

2013		persons full-time		Persons part-time		Part-time in FTEs
employed	m	135	76%	83	47%	62.9
	f	42	24%	93	53%	67.6
n=56	***subtotal***	***177***	***100%***	***176***	***100%***	***130.5***
Self-employed professionals	m	3	43%	7	54%	2
	f	4	57%	6	46%	1.7
n=20	***subtotal***	***7***	***100%***	***13***	***100%***	***3.7***
	total	**184**	**100%**	**189**	**100%**	**134.2**

Table 67 Distribution of number of employees by gender and contract size (n=76).

2013 n=		persons full-time	% of total	persons part-time	% of total	Part-time in FTEs	total no. of persons
2	State	41	11%	26	7%	20,3	67
3	Provinces	3	1%	4	1%	3	7
25	Municipalities	46	12%	47	13%	32,2	93
1	Universities	7	2%	7	2%	3,4	14
12	Semi-government	11	3%	34	9%	25,8	45
13	Companies	69	18%	58	16%	46,7	127
20	Self-employed professionals	7	2%	13	3%	3,7	20
76	**total**	**184**	**49%**	**189**	**51%**	**135,1**	**373**

Table 68. Distribution of number of employees full-time and part-time to (sub)sector (n=76).

5.7 Vacancies

The number of vacancies on the archaeological labour market are presented below.[33] It is in part a downward trend with a relative revival in the years 2009 and 2012. The number of vacancies in the year 2013 are available for three quarters and add up to a total of 132 against 269 form the same three quarters of the year before. Thus, there are significantly fewer jobs in 2013 (decrease by 49%).

	Quarter				
	1e	2e	3e	4e	**total**
2008	94	110	101	109	**414**
2009	117	109	122	101	**449**
2010	113	86	82	61	**342**
2011	104	98	62	40	**304**
2012	60	121	88	92	**361**
2013	45	47	40	-	**132**

Table 69. Overview of historical data of vacancies.

Percentage changes per quarter are displayed in Figure 21 in order to get an impression of the market development. All quarters after 2009 show a declining trend, with a small recovery in 2012.

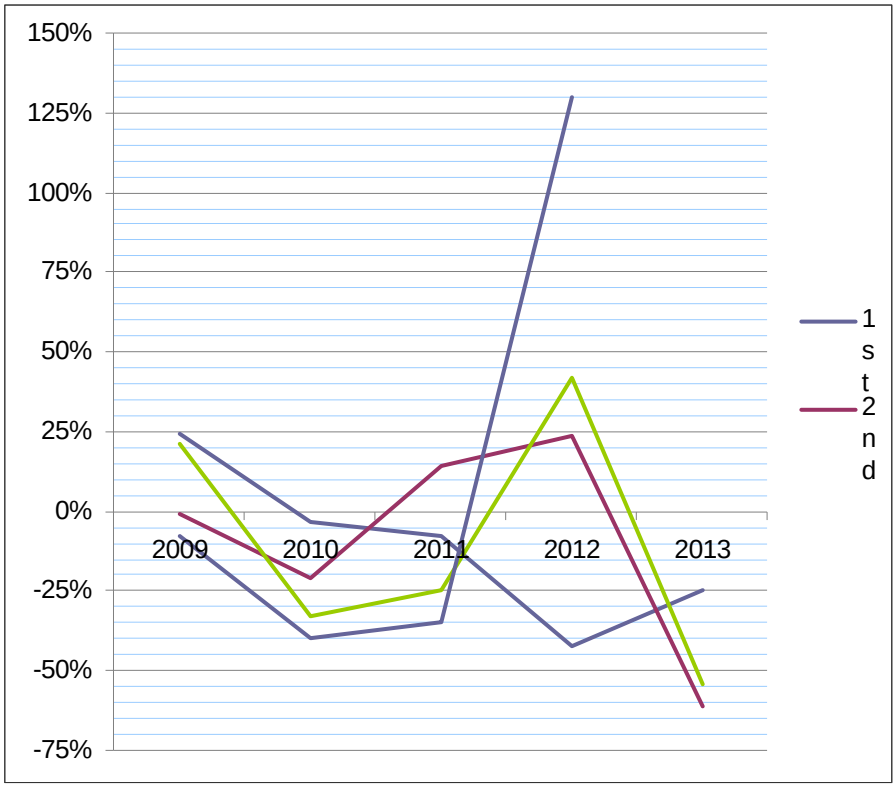


Figure 21. Percentage change for the 1st, 2nd, 3rd and 4th quarter calculated compared to the same quarter in the previous year (2008 = 0-measurement).

[33] overview of vacancies offered by Esther Vriens (Vriens Archeo BV)

6 Training

6.1 Introduction

A connection from training to practice is not always self-evident, given the broadness of the profession and the various roles of archaeologists. Additional as well as new knowledge and skills are needed.

6.2 Training demand

Generally, employers are not dissatisfied with the knowledge and skills of their employees. Of the respondents 38% said that knowledge and skills obtained during the training meet the requirements of the job. 24% think that knowledge and skills do not match the job requirements (see Table 70a and b, first row).

6.3 Frameworks for training

To a number of archaeological activities no qualification requirements are made. These are mainly in the area of consultancy. Other archaeological activities, however, do require education and training.

6.3.1 *Kwaliteitsnorm Nederlandse Archeologie* (KNA, Dutch Archaeological Quality Standard for Archaeology)

In the Dutch Quality Standard for Archaeology, specific training requirements are made to actors who perform certain activities.[34] It concerns activities in the archaeological process crucial for conducting research.
In addition to the various university educations in archaeology and applied sciences, other disciplines are set out in Annex II of the KNA, such as a MA in Earth Sciences (physical-geographical specialist) and MA Restauration (conservation specialist). Furthermore, the KNA states requirements on experience expressed in relevant work experience, in the relevant fields and shown by relevant publications.

6.3.2 Programme *Uitvoering met Ambitie* (PUmA)

For municipalities, a program has been organized, called PUmA, encompassing quality criteria for the authorisation, supervision and enforcement in the *general provisions environmental Law* (Wabo).[35] For a number of archaeological activities, such as advising on

[34] Bijlage II van de KNA, Eisen aan actoren
http://www.sikb.nl/upload/documents/KNA33/defitief/Deel%20II%20bijlage%20II%20Eisen%20aan%20de%20actoren%20versie%203.3.pdf
[35] Kwaliteitscriteria 2.1, Uitvoering met ambitie.nl, http://www.omgevingsdienst.nl/docs/1367412683.pdf

archaeology in the context of an environmental licence and the assessment of an archaeological report, criteria are set for required education and training of civil servants (Higher Education and 2 years of work experience).

6.3.3 Professional register

Since 1998, the *Nederlandse Vereniging van Archeologen* (NVvA, Dutch Association of Archaeologists) worked for the design, preparation and implementation of a professional or trade register. This registry would be a mark of quality offer for all active archaeologists in the Netherlands,. In addition to the KNA and the permits of the Cultural Heritage Agency of The Netherlands, the professional register was thought to be the third pillar in the quality control system of Dutch archaeology.
The sector at the time, however, was of the opinion that a professional register for archaeologists offered no real added value, there was not enough support. Then in May 2010, the assignment to the implementation of a national professional or trade register by the NVvA was given back to the minister of Education, culture and science.

6.4 Training delivery

In addition to university training, there are also additional courses offered to provide in the (missing) knowledge and skills.

6.4.1 Universities

The VU University together with the University of Amsterdam invested in vocational training for graduates from the end of the years '90. Firstly, with a course in project management, secondly, together with Vriens Archeo BV, a wider platform was created for vocational training (PASTA) founded commissioned by the SIKB (see below).

6.4.2 Saxion University for Applied Sciences

Despite the fact that Saxion, in general, offers a large selection of after - and in-service courses, there are no courses within the field of Archaeology.[36]

6.4.3 PASTA

Since 2007, on the initiative of the Foundation for Infrastructure QualityAssurance Soil management (SIKB), a consortium was formed under the name of PASTA (Post-graduate educational program Archaeology).[37] Professionalism requires constant training and updating of knowledge. Therefore, the part taking organizations, Vriens Archeo Flex, the

[36] http://saxion.nl/peno/deeltijd/studiekiezer/
[37] http://www.scholingarcheologie.nl/

University of Amsterdam and the Institute for Geo - and Bioarchaeology of the VU University in Amsterdam, offer various courses in vocational training.

6.5 Employers' commitment to qualifications and training

The employers were asked whether any (annual) budget is set aside for training and development of employees and whether there is a training programme for the employees. Strikingly, most organizations reserve a budget for training, but they have no training programme for their employees. Self-employed professionals have plans for vocational training but have less budget for it.

2013							
	Yes		**No**		**Not completed**		**total**
Do knowledge and skills obtained during the training meet the jobs requirements of your employees?	34	38%	21	24%	34	38%	89
Has your organization budget earmarked for training and development of staff in 2013?	45	51%	10	11%	34	38%	89
Has your organization/company, a training programme for employees?	15	17%	40	45%	34	38%	89

Table 70a. Attitude of employers towards training and education.

2013	**Government**		**Semi-government**		**Companies**		**Self employed**	
	yes	no	yes	no	yes	no	yes	no
Do knowledge and skills obtained during the training meet the jobs requirements of your employees?	69%	31%	64%	36%	42%	58%	47%	53%
Has your organization budget earmarked for training and development of staff in 2013?	81%	19%	82%	18%	83%	17%	47%	53%
Has your organization/company, a training programme for employees?	28%	72%	18%	82%	33%	67%	88%	12%

Table 70b. Attitude of employers towards training and education is divided into (sub)sector (n=72).

6.6 Skills gaps and shortages

6.6.1 Loss of skills and knowledge

In respect to knowledge and skills, a distinction is made between a shortage and a lack. A shortage means that employees possess insufficient knowledge and skills, while a lack may imply that an employer has a certain gap in knowledge and skills in the organization. Loss of skills may occur through budget cuts and people leaving the organization. On a personal level, knowledge and skills can be lost as a result of lack of practice.

Compared to 2008-2009, there is now a large deficit detected in the area of policy instruments. On the other hand, knowledge and experience in the field of methods and techniques have greatly improved compared to 2008-2009.
Further appointed gaps in knowledge and skills are project management, legal knowledge, knowledge in the field of spatial planning, operational management.

	2008/2009[38]		**2012/2013**	
Knowledge of the Quality Standard (KNA)	-		10	10%
Material culture	7	9%	7	7%
Methods and Techniques	17	22%	6	6%
Geology and soil	-		7	7%
Conservation	4	5%	4	4%
Concepts & historical periods	-		2	2%
ICT	9	11%	8	8%
Policy instrumentation	2	3%	21	21%
Research skills	6	8%	5	5%
Writing skills	9	11%	9	9%
Archaeology and the public	9	11%	9	9%
Other	16	20%	12	12%

Table 71. Knowledge and skills obtained during the training that does not meet the requirements of the applied function. In times mentioned (n=64).

6.6.2 Investments

Organizations earmark budgets for education and training to catch the shortage of knowledge and skills. The reserved amounts over the years have been consistently higher than the actual expenditure. Compared to 2008, the reserved training budget decreases slightly. In the year 2013, the expenditure of the respondents c. **€**12,000. The basis of 519 people working in these organizations is that an expense of **€**23.12 per person.

[38] Waugh 2008, 53.

	2008		2012		2013	
	reserved	expense	reserved	expense	reserved	expense
Government	4,611	3,875	3,385	2,375	3,269	2,400
Semi-government	5,000	1,875	4,250	1,375	4,250	2,000
Companies	10,833	9,767	6,286	6,283	6,214	7,170
Self-employed professional	1,108	1,025	1,279	471	1,229	435
total	**21,552**	**16,542**	**15,200**	**10,504**	**14,962**	**12,005**

Table 72a. Average amounts in euro per year for education and training (n=32).

This is only a fraction of the total budget the archaeological sector handles for education and training. Because the amounts in the Table 72a have not been extrapolated to all the (sub)sectors, an actual amount on an annual basis cannot be given.

How the budget is spent can be deduced from Table 72b. Given the lack of knowledge and skills in the area of policy instruments, it is not surprising that a large part of the budget is there. But also writing skills and other score high. In the 'other' category were also project management, legal knowledge, spatial planning, management, etc. mentioned.

2013		
Training programme	**No. of people**	**percentage**
Learning on the job	5	7%
Knowledge of the Quality Standard	1	1%
Material culture	1	1%
Methods and Techniques	3	4%
Geology and soil	7	10%
Conservation	1	1%
Concepts & historical periods	1	1%
ICT	7	10%
Policy instrumentation	12	16%
Research skills	6	8%
Writing skills	12	16%
Archaeology and the public	5	7%
Other	12	16%

Table 72b. Training for employees by subjects mentioned (n=70).

6.6.3 Shortage of knowledge and skills

When a lack of knowledge and skills occurs, organizations tend to use of temporary staffing. This can be done through a temporary employment agency, by a competitor or a similar organization. A number of 15 out of 59 organizations answered that for certain expertise, especially specialist functions, self-employed persons were hired.

2013	Government		Semi-government		Companies	
Post profiles	**No. of persons**	**FTEs**	**No. of persons**	**FTEs**	**No. of persons**	**FTEs**
Senior archaeologist	1	0.4	1	0.2	3	3
Junior archaeologist			1	0.2		
Senior archaeological specialist	1	0.4			5	3
Junior archaeological specialist						
Non-archaeological specialist	11	10.2			2	0.4
Senior field technician						
Junior field technician						
Other (labourer etc.)	1	0.2			5	2.5
Junior prospector						
Senior prospector	1	0.1				
Junior advisor						
Senior advisor	4	1.4			1	0.3
Junior policy officer	1	0.2				
Senior policy officer						
Scientific staff						
Educators						
Support staff						
total	**20**	**12.9**	**2**	**0.4**	**16**	**9.2**

Table 73. Expertise that is purchased in the number of persons and FTEs per (sub)sector (n=59).

Bibliography

Anonymus, 2010, *Monitor Erfgoedinspectie. Staat van naleving 2009-2010*, Erfgoedinspectie.

Anonymus, 2012, *Beleidsreactie evaluatie archeologiewetgeving*; Staatssecretaris OC&W, 2012.

Anonymus, 2013, *Monitor Erfgoedinspectie. Staat van naleving 2011-2012*, Erfgoedinspectie

Aitchison & Rocks-Macqueen, 2013, Archaeology Labour Market Intelligence: Profiling the Profession 2012-13, Landward Research 2013.

Beukers, E. (ed.), 2009, *Erfgoedbalans 2009*, Rijksdienst voor het Cultureel Erfgoed, Amersfoort.

Dries, M. van den, S.M. Kwast, in press, *Post-Malta developments in the Dutch archaeological profession,* Faculty of Archaeology, Leiden University.

Keers, G., H. van der Reijden, H. van Rossum, 2011, *Ruimte voor Archeologie. Themaveldrapportages evaluatie WAMz*, rapport P18090, RIGO Research en Advies BV.

Lauwerier, R.C.G.M., e.a. 2002, *Archeologiebalans 2002*, Rijksdienst voor het Oudheidkundig Bodemonderzoek.

Waugh, K. E. (2008). *Discovering the archaeologists of Europe: Netherlands,* Vestigia http://www.discovering-archaeologists.eu/national_reports/DISCO_national_Netherlands_English_ fi nal.pdf .In Dutch: http://www.discovering-archaeologists.eu/national_reports/DISCO_national_NL_ Dutch.pdf

Annex 1

***Discovering the Archaeologists of Europe* 2014 core data**

'Archaeologist' should be defined and justified by each country. Definitions should be as broad as possible. Education should not be regarded as of primary importance in determining whether an individual is to be regarded as an archaeologist.

See part 5.0 of the **2006-08 Transnational Report** (at http://www.discovering-archaeologists.eu/DISCO_Transnational_Report.pdf).

1. How many people work in archaeology?

Estimated number of archaeologists in your country (or actual number if you know it to be true).

See part 2.5 (p.11) of the UK National report from 2006-08 for discussion of an example of how this has been calculated (at http://www.discovering-archaeologists.eu/national_reports/DISCO_national_UK_final.pdf)

How confident are you of the estimated number?

Is this the number of 'archaeologists' or of 'people working in archaeology', that is, have you used a broad or narrow definition?

2. Age and gender of individuals working in archaeology. The 2006-08 survey identified ages in ten-year bands, <20 years old, 20–29, 30–39 etc, then '60 and over'.

Table showing **actual numbers** by age and gender in ten-year or five-year bands.

See part 9.0 of the 2006-08 Transnational Report for how the consolidated data was presented, and Table 33 (p.49) in the UK 2006-08 report, which shows numbers of female, numbers of male, and numbers of all archaeologists by age (in 5-year bands) that the survey provided information about.

3. Disability status of individuals working in archaeology.

Give the **actual number** of disabled individuals reported to the survey, the total number of people for whom this information was provided, and the total number of people covered by the survey. eg 'the survey gave information about 1000 archaeologists, but the disability question was only answered for 800 archaeologists, of whom 20 were disabled'. Provide any relevant information about employment of disabled people in your country, or the way disability is defined in your country.

See part 10.0 (p. 17) of the 2006-08 Transnational Report and page 52 of the UK 2006-08 report.

4. The country of origin of individuals working in archaeology.

Give the **actual numbers** of archaeologists reported to the survey – how many from your country, how many from each of the other countries, total number for whom this information was provided. Give subtotals for EU and non-EU countries.

See part 11.0 (p. 18) of the 2006-08 Transnational Report and pages 53-54 of the UK 2006-08 report.

5. Whether individuals are employed part time or full time.

Give the **actual numbers** of archaeologists reported to the survey – how many work full time, how many work part time, and how many this information was provided for.

See part 13.0 (p. 22) of the 2006-08 Transnational Report and pages 87-89 of the UK 2006-08 report.

6. Were more or fewer people employed in archaeology one year ago, three years ago and five years ago?

See parts 7.0 and 8.0 (p. 13-14) of the 2006-08 Transnational Report

Also see part 4.2 (pages 41-43) of the UK 2006-08 report for discussion of methodology, but there may be other ways of describing the extent of growth or contraction of the profession for your country.

7. Is it expected that more or fewer people will be employed in archaeology next year and in three years' time?

Details under point 6 above.

8. The highest qualification obtained by individuals, to include post-doctoral level Habilitation or equivalent.
   Whether this qualification was obtained a) in the partner country, b) in another European country, or c) elsewhere.
   Whether this qualification included archaeology.
   Both academic and technical/craft qualifications should be included as applicable.

Give the total **actual numbers** of highest qualifications reported and whether these included archaeology or not.

Give the total **actual numbers** for where qualifications were obtained – in partner country / in another European country / elsewhere in the world.

See part 12.0 (p. 20) of the 2006-08 Transnational Report and part 4.5 (pages 54 – 57) of the UK 2006-08 report.

9. Information on training needs and skills shortages from the point of view of employers. Whilst this is a core data area, the specifics will vary from country to country.

This question will vary from country to country, so there is no recommended way of presenting this data.

These data were not presented in a consolidated way in the 2006-08 Transnational Report; refer to individual national reports at http://www.discovering-archaeologists.eu/final-reports.html. See parts 6.4–6.7 (p. 103-117) of the 2006-08 UK report as an example.

10. Salaries or wages paid for archaeological work. It was emphasised that this area of investigation needs to be treated anonymously and confidentially.

Give the average (mean) annual salary for full time archaeologists and also present a distribution table like Table 66 in the 2006-08 UK report (p. 71). Include the number of people for whom you received salary data. Provide some comparative data for other salaries

in your country. Make sure you specify whether this figure includes tax or not (gross or net), and explain which you have used (eg in the UK salaries are always quoted including tax).

See 2006-08 Transnational Report part 14.0, p. 23.

11. Information about the kinds of contracts held by employed archaeologists; this particularly relates to whether people are on short-term, temporary contracts or on permanent contracts.

These were not core data in 2006-08, and so each partner should phrase questions in the best way for your own country.

See part 5.4 of the UK 2006-08 report, p. 84-87, especially table 84, for an example of how this has been done in the past.

12. Data about the types of organization operating in archaeology in country by activity and organizational basis

Obtain data about how organizations are constituted (eg – part of national government, part of local / municipal government, universities, private companies etc) and what kind of work they do – broken down into the categories of doing fieldwork, giving advice, providing education, providing museum services.

These were not core data in 2006-08; see parts 3.2-3.3 (pages 33-35) and especially part 4.1 – table 18 – on page 39 of the UK 2006-08 for an example of how this was collected in the UK previously.

Annex 2 Questionnaire