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Title Benchmarking: the importance of job matching

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Abstract There is a paradox of salary benchmarking insofar as that, at any particular moment, the remuneration system for an international organisation reflects its unique history, traditions, objectives and circumstances. On the other hand, the output of international organisations relies heavily on the successful management of human resources. A key element of this rapidly-evolving field concerns the effectiveness of their reward and compensation systems. Literature review suggests that for various reasons, attention has primarily focused on private sector organisations: there is a gap to be filled for the international public sector. International organisations face similar challenges in recruiting, retaining and motivating employees – and there is consequent interest in comparing their remuneration systems to ensure they adequately meet those needs. To be meaningful, any such comparison must be soundly based. As in other areas, core statistical principles of comparability and representativity should apply. This presentation examines the approach to job matching employed for the 2019 comparison exercise between participating international organisations. A subsequent paper will describe the approach to salary definition.

Keywords Remuneration, Benchmarking, International Public Sector Organisation, Comparability, Representativity, Job Evaluation, Point Factor Score

Disclaimer The opinions expressed in this document represent the authors' points of view and are not necessarily shared by the European Commission (Eurostat).

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Introduction: Why benchmark?

Particularly in the private sector, many employers have reward strategies which involve relative positioning to comparator organisations. In the public sector, concerns about values and internal and external equity have generally been considered more important, requiring a focus going beyond monetary compensation. Moreover, the unique traditions and aims of international organisations may require a specific staffing profile and justify a specific reward strategy. Nevertheless, in a competitive labour market there may still be pressure to monitor remuneration practices of other organisations. This paper examines one of the key aspects of such work and their application for a 2018-2019 comparison exercise coordinated between international organisations: the approach to job matching. A separate paper will examine the approach to salary definition.

Skills

The goal of all human resource management is to have the right people in the right place doing the right thing. Even if the public sector may not face direct competition for its outputs, the risk for employer organisations of an inadequately skilled workforce is evident. Arguably for supra-national organisations, the need for suitably qualified staff is even more apparent, given the potential depth and breadth of their policy-setting impact. However, the risk of an over-skilled workforce may attract less obvious attention. It can bring risks relating to non-retention of employees (switching generates regular recruitment and training costs plus the hidden costs of delays to production) and to demotivation of employees (mismatch of competences with tasks generating hidden cost of reduced quantity/quality of outputs).

With the expansion of higher education in many EU member States, some observers have expressed concerns about a possible oversupply of graduates to meet the needs of the economy. This implies forcing graduates into jobs that do not demand graduate-level skills, and displacing potential employees without degrees who might be better suited to such tasks. Of course, the labour market matches job opportunities and jobseekers, and better education is clearly historically linked with better productivity for employers and higher earnings level/faster progression for employees (social studies have confirmed similar findings post millennium and pre-millennium). It is with this perspective that the Lisbon Council (2009) set the objective of making the EU the most dynamic, knowledge-based economy in the world. In fact, international organisations may be competing for a limited pool of super-skilled workers whilst operating under budgetary constraints.

Measuring staff satisfaction

One tool to identify potential skill mismatching is internal satisfaction surveys. For example the Workplace Employment Relations Survey in UK regularly finds that a significant majority of degree-holding respondents considers the tasks they are asked to fulfil in their jobs do not fully utilise their acquired skills. Even allowing for some degree of inflated self-opinion, this perception has clear implications for motivation and quantity/quality of output. Public sector can perhaps be assumed to exhibit higher satisfaction levels than private sector, because they have a more vocational than instrumental attitude towards their work (there is a long academic discussion about this point).

The DGHR staff satisfaction survey is run every two years. Respondents have repeatedly declared high levels of job satisfaction – for example the 2018 exercise identified 76% of European Commission staff felt their skills matched their job and 74% were happy with their level of responsibilities. In a UN global staff satisfaction survey run in 2017, staff also declared high engagement and empowerment levels. [It would be interesting to know whether other international organisations run similar surveys and make their results public.](#)

Reward management

The role of compensation policy in the contemporary era, as in the past, is for organisations to offer a bundle of rewards in exchange for the contribution received from staff. Armstrong defines the following aims of reward management:

- Support the achievement of business goals by developing a performance culture and stimulating high performance;
- Define what is important in terms of behaviours and outcomes;
- Align reward practices with employee needs;
- Reward people according to the value they create;
- Attract and retain the high quality people the organisation needs;
- Motivate and win the engagement of employees;
- Add value through the introduction of effective but affordable reward practices.

Whilst the precise content has varied over time, it is increasingly accepted that although monetary reward is an important element of the employment relationship, there are a range of other immediate, deferred and contingent elements which employees receive, including many non-monetary components.

Marchington identifies the following key, value-laden choices to be made by employers:

- What to pay for, including time, performance, skills/qualifications or some other person-centred attribute or behaviour;
- Whether to pay for seniority/time-served or for performance;
- What position to adopt in the market – close to the average pay level in the market or within the upper quartile or lower quartile of the distribution;
- Whether to place primary focus on internal equity or to be more concerned about external benchmarks;
- Whether to adopt a centralised or decentralised approach to reward, or a hybrid approach with some central control and a degree of localised latitude;
- Whether to build hierarchy into the reward system such that there are seniority or status-related rewards, or to devise a harmonised, single-status approach;
- The precise nature of the reward “mix”.

Given that employee motivation is individualised and complex, it is a challenge for any organisation to orientate their strategy successfully. Famously, Herzberg has argued that pay and promotion systems are a “hygiene” factor which needs to be adequate to prevent dissatisfaction, but are less effective as a motivating factor than other aspects of job such as responsibility or autonomy. On the other hand, later researchers (largely in private sector studies) suggest that whilst staff may say pay is not a key motivation, their actions indicate otherwise. For example “equity theory” suggests staff balance their inputs (eg. skills, effort) in response to outputs received (eg. salary, esteem). Thus employers are recommended to ensure that reward systems are fair, transparent and consistent.

External benchmarking

Most international organisations have explicit policies referring to recruitment in terms of merit – and examination of the recruitment advertisement websites of major international organisations¹ suffices to show similar emphasis on elements such as: competitive base salary, attractive benefits package, exciting opportunities for career development and international mobility, a fair and inclusive workplace, talented colleagues, a dynamic and diverse environment.

For example Article 27 of the EU Staff Regulations identifies that “*Recruitment shall be directed to securing for the institution the services of officials with the highest standards of ability, efficiency*

¹ For example: European Commission: https://epso.europa.eu/why-eu-careers_en; United Nations: <https://careers.un.org/lbw/Home.aspx>; Coordinated Organisations:

<http://www.oecd.org/careers/yourcareerattheoecd/> .

and integrity, recruited on the broadest possible geographical basis from among nationals of Member States of the Union". There is no formal mechanism to ensure this geographical balance is maintained, and a Commission report in 2018 suggests it may not be being achieved in practice and recommends a specific policy response. By contrast, the United Nations Staff Regulations set an explicit requirement to be able to recruit from the civil service of all Member States – and consequently peg the UN salary scale to the highest-paying civil service², with a supplementary margin (110-120 per cent). The General Assembly has repeatedly endorsed this approach, recognising the expatriate nature of international civil servants (higher costs; impact on networks).

Many international public sector organisations have experienced budgetary austerity since the millennium, and particularly due to the global economic crisis from 2008. A 2019 European Court of Auditors report finds that important savings have been generated by the most recent reform but raises concerns about the impact on perceived attractiveness of the European Commission as an employer.

Of course, each international organisation is unique, with its own historical tradition and culture, its singular aims and mission objectives, and its specific staff profile. Nonetheless, no organisation can survive in the long term if their pay structures are not sufficient to attract, retain and motivate staff. This is the justification for collecting evidence about market practices. There is no such thing as a single market rate, but market rate analysis (comparison with other employers) can be a powerful tool to inform policy decisions.

Armstrong clarifies the aims of market analysis as follows:

- Obtain relevant, accurate, representative and up-to-date data on levels of pay and benefits for specified jobs;
- Deduce from this information the market (going) rate or range for a position, taking into account the type and size of the job and such variables as company size, sector and location;
- Maintain a competitive pay and benefit position in relation to the marketplace, thus enabling the organisation to attract and retain people of the quality it needs;
- Inform decisions on levels of pay for individual jobs and pay brackets or scales for pay structure grades;
- Provide guidance on pay review decisions concerning any adjustments required to general or individual pay levels;
- Support a market pricing approach to valuing jobs – this will be particularly important when the organisation decides that its pay levels should be “market-driven”;
- Offer guidance on internal differentials by reference to the differentials in the external labour market.

It should be stated at the outset that there can be clear limitations with such comparisons.

Statistical principles

The aim is to compare like-with-like, but this is difficult to achieve. In practice there is an inevitable degree of intuition and judgement in the comparison process. However, the more rigorous and scientifically serious the process of analysis underlying the comparison exercise, the more useful the results will be for policy decision-making. By far the most important stage is the job analysis and matching between organisations. Crude and misleading comparisons based solely on job titles will fail to capture differences in actual job content and occupant profile.

The selection of comparator organisations

International organisations do not recruit exclusively from civil service, thus the choice of appropriate comparator is a fraught one. No formal guideline exists to determine the number of comparator organisations to be included in the comparison exercise, or that the chosen ones are the most appropriate. There is a tradeoff to be made between costs and benefits.

² This is the “Noblemaire” principle, named after the League of Nations diplomat who first elaborated it.

In 1999, the Commission concluded a contract with an external agency, PLS Ramboll, to attempt a comparative study. This was done with reference to 3 international organisations (UN, EIB, NATO); 5 Member State civil services (Denmark, Germany, France, Italy, United Kingdom); and 5 multinational companies (anonymous).

In 2008, the Commission concluded a contract with a different agency, Matrix Insight, to attempt another study. That was done with reference to the civil services of 8 international organisations (UN, NATO, EFTA, CoE, WTO, EPO plus 2 anonymous); 10 Member States diplomatic services (ES, CY, PL, FI plus 6 anonymous); 7 Member State civil services (DK, EE plus 5 anonymous) and 1 multinational company.

The United Nations International Civil Service Commission (UN ICSC) has conducted a number of “Noblemaire” comparison exercises over time. Firstly it ranks countries using information about per capita GDP and minimum wage. Then it eliminates countries with small numbers of civil servants, and those with pay structures which are unlikely to be comparable to the UN. A decision is then taken whether to do a detailed comparison with civil service of one or more countries from the short list. For the 1994-1995 exercise they looked at Germany and Switzerland. For the 2005-2006 they looked at Belgium. On neither occasion was there evidence that the United States Federal Civil Service should be replaced as the comparator organisation for the UN. The UN also compare salary levels with international organisations. In 1994-1995 and in 2005-2006, the OECD and World Bank were selected. [The next study was postponed from 2015-2016 and will now take place during 2019-2020.](#)

Eurostat compiles annual data for civil servants in EU Member States according to broad grade equivalency in accordance with Article 65 and Annex XI of the Staff Regulations. This equivalence is established on the basis of detailed bilateral discussions, formalised in “country A65 procedure manuals”. Whilst the results are compiled in order to monitor evolution of salaries, they are based on snapshots of salary levels which can be analysed to provide a broad comparative indication of levels. The national data sets are published as an Annex to the annual Eurostat Remuneration Report: a time series is available for download from Eurostat website³. A comparative analysis of these salary levels and Commission salary levels was done by Eurostat in 2013.

The International Service for Remuneration and Pensions (ISRP) of the Coordinated Organisations collaborates closely with Eurostat regarding Article 65 data collection for Belgium, France, Germany, Italy, Netherlands and Spain. The ISRP conducts periodic comparison exercises between the CO salary scale and the civil services of 8 Member States (the 7 mentioned in the preceding sentence plus United Kingdom); diplomatic services in Brussels of these 8 Member States; 5 international organisations (CERN, EBRD, EU, UNESCO, World Bank); private sector salaries in the 8 Member States. Studies were done in 1996, 2000, 2004 and 2009.

In 2014, Eurostat contracted an external consultant to coordinate a pilot study. Results were published at 2017 Expert Working Group on Articles 64&65 of the Staff Regulations. There were 6 participant organisations: European Commission - BE/Brussels, United Nations - USA/New York, Organisation for Economic Cooperation and Development (OECD) representing Coordinated Organisations common system - FR/Paris, European Organisation for the Safety of Air Navigation (EuroControl) - BE/Brussels, European Patent Office - DE/Munich, and the Commonwealth Secretariat - UK/London.

In 2018, the same external consultant was contracted to coordinate a follow-up study. For this exercise, there were 10 participant organisations⁴. The first 5 organisations from the 2014 pilot study participated again, together with 5 additional organisations: European Centre for Nuclear Research (CERN) - CH/Geneva, World Trade Organisation (WTO) - CH/Geneva, European Central Bank (ECB) - DE/Frankfurt, European Investment Bank - LU/Luxembourg, European Stability Mechanism - LU/Luxembourg.

3 See “A65 Annex 2 reports” on dedicated section <https://ec.europa.eu/eurostat/web/civil-servants-remuneration/publications>

4 EFTA and World Bank were contacted but did not provide data.

Some studies compare present salary values for each organisation. The 2014 pilot study and 2018 follow-up study compare data for matched pairs of occupations between organisations.

Phase one: the identification of occupations

Job content analysis

Job content analysis is the whole series of activities undertaken to systematically categorise and document all relevant information about a specific position. The approach can be inductive or deductive. Many models have been developed over time in the academic literature. Whichever is taken, the end product is a standardised job description. These can be included in an occupational classification which lists all the jobs in an organisation and groups them according to tasks and duties performed. A common statistical International Standard Classification of Occupations (ISCO) exists, however OECD reports have found that this is less widely applied in public sector.

Types of job evaluation

As long as they contain sufficient detail, the information in job descriptions can be used efficiently for a wide variety of HR purposes. Internally, they can be used to rank jobs and allocate them to pay grades. Externally, they can be used for benchmark comparisons.

A distinction can be made between non-analytical schemes and analytical schemes. Simplistic job ranking involves placing each job in a hierarchy determined by comparing one job with another and arranging them in perceived order of importance and value. Job classification is slightly more complex, in that classes or grades are established with particular criteria and key characteristics, and the jobs are placed in those grades.

Analytical schemes involve breaking jobs down into component elements or key factors. It is assumed that each of the factors is present in all jobs, and the degree of that presence will contribute to job importance. Numerical point scores can be allocated to each factor. Summing the score for each job gives a total that represents overall job importance. Different jobs will score differently on the different factors, but can potentially have the same total score. The Hays Guide Chart Profile Method is one such method, widely used in the private sector. It uses three broad sectors (“know-how”, “problem-solving” and “accountability”) which are themselves broken down into sub-factors. Another is the United States Bureau of Labour Statistics national compensation survey which uses four broad categories (“knowledge”, “job controls and complexity”, “contacts” and “physical environment”).

In principle, the same scheme with the same factors, factor levels and scoring system can be applied in the same way in any organisation. In practice, HR systems within international organisations have evolved in isolation, according to specific needs of each administration. Different approaches have been adopted: there appears to be no harmonised coding system. Consequently, in order to attempt comparisons between them, the only option is to invest in a time-intensive study.

Data availability

Keeping HR details secret is clearly important for legal privacy reasons. However sharing and pooling anonymised information is an essential component of the comparison exercise.

Within Member States, national statistical authorities typically have legal rights to compile data at national level. In the field of remuneration statistics, Eurostat has a legal mandate from the EU Staff regulations to compile Member State data for statistical purposes and conduct whatever associated studies it considers necessary.

This allows European Statistics to be developed. There is no similar power regarding data collection from international organisations: participation in 2014 and 2018 comparison studies was done on a voluntary basis⁵.

Some international organisations make extensive information publicly available, including staff regulations, pay scales, standard job descriptions. Others are more restrictive, which means information has to be obtained through direct contact.

For the 2014 pilot study and 2018 follow-up study, practical integration/cohesion problems were encountered with some participants, and even within individual organisations issues had to be resolved with multiple respondents and separate systems. [An ideal future solution would involve HR departments of international organisations agreeing with IT departments to encode a variable with job equivalence score. Once scores were attributed, it would then be a relatively easy task to count numbers.](#)

Representativity

The first step is to identify the most representative jobs to be compared. This requires information about numbers of staff. Depending on the way their HR systems are coded, organisations may not have possibility to categorise jobs in alternative ways.

For the 2014 pilot study, focus was on representativity of jobs from EU perspective. Representativity was assessed as quite low for some comparator organisations (around 20%). Consequently, for the 2018 follow-up study, an attempt was made to achieve more balanced representativity.

The number of jobs evaluated may be important for the accuracy and quality of the resulting relative grading of positions.

For the 2000 Commission study, jobs were examined and compared on the basis of information compiled via questionnaires and interviews. The following 6 factors were used: “problem-solving”, “decision-making”, “working relationships and communication”, “management or specialised responsibility”, “education” and “experience”. For the 2009 Commission study, 27 jobs were examined and compared: a relatively simple benchmarking approach based on job titles and brief job descriptions was used.

The UN grade equivalency study with the United States Federal Civil Service is conducted at approximately 5 year intervals. Each time, it involves an elaborate process of classification and matching due to changes in tasks and occupants since the previous exercise. UN job description grades are compared with corresponding US grades to identify equivalent job content. For the 2009-2010 exercise, some 500 jobs were initially examined. The most representative UN jobs were identified according to staff numbers data: **24 categories were selected**, representing 24,000 staff. 25 US agencies were then invited to supply corresponding job descriptions. These were examined and classified according to UN system (matched). In 2013, the approach was reviewed by the US General Accounting Office.

For the 2009 ISRP comparison, **41 jobs were examined** (increase from 29 in previous study). and compared between the international organisations.

For the 2014 and 2018 exercises, the full family of EU occupations was initially examined. From these, **27 reference occupations were retained**, selected for representativity. It should be noted that the job structure of the EU is such that in standard job descriptions there is no official distinction of tasks between administrators in different grades.

⁵ For Eurostat, United Nations and Coordinated Organisations, there is a 2009 trilateral Memorandum of Understanding which has developed over time from a purely transactional system focusing on cost-of-living statistics into a transformational relationship bringing mutual benefits to all participants in areas, including civil servant salary benchmarking. The original text may in future be amended to formally recognise this evolution. Eurostat also has cooperation arrangements with other international organisations.

There is consequently a theoretically large salary range. To make meaningful comparisons with other organisations it is necessary to integrate information about job levels (eg. using the degree of responsibility in terms of budget/staff or the level of experience/seniority).

The job profiling was done in two phases, with a primary focus on matching functions and duties, and a secondary focus on matching education, experience, knowledge, contacts, supervisory responsibilities. Firstly, broad families were identified (eg. legal, financial, etc). Then factors relating to work level were evaluated using available job descriptions. A points system was used, with score ranged from 0-25-50-75-100, representing degree of similarity. Finally, the average point score was calculated: only jobs with an overall figure exceeding 70 were considered comparable. For the 2014 exercise, final comparison pairing was done for 10 EU occupations, 5 at “administrator” level and 5 at “assistant” level (ie. one for each level between EU system and each of the other 5 participating organisations). For the 2018 exercise, final comparison pairing was done for 24 EU occupations, one each at Head of Unit, “administrator” and “assistant” levels between EU system and each of the other 9 participating organisations except for CERN (not Head of Unit) and ESM (not Head of Unit or “assistant”).

An aspect of the EU system is that the common salary scale applies to all grades assessed as equivalent, irrespective the precise tasks. Thus a scientist, lawyer, accountant, economist, statistician may be on same scale. The situation is similar in other international organisations - thus the actual pairing for one type can be extrapolated to other types.

An example of preliminary point scoring approach is included in **Table 1** below. This includes just two UN job descriptions compared with broad EU job description.

The final retained set of comparison pairs is shown in **Table 2** below.

Table 1: EXAMPLE POINT SCORING

Comparison factor	EU - Economist (AD5-12) eg. desk officer	UN - Economist (P2)	UN - Economist (P5)
1. Functions and duties	Special economic system and economic analysis Policy development Inter service coordination and consultation	Analysing (specifically defined) aspects of technical and policy problems Preparing feasibility studies Analysing economic and policy developments Data analysis and model operation	Direct supervisory responsibility for the work of several professional and support staff Leadership and coordinating the activities of the staff Planning and management Advising member nations and intergovernmental and non-governmental bodies Preparing expert studies Organizing and leading field missions Planning and organizing workshops
2. Education	University level (4 years)	Advanced university degree	Advanced university degree
3. Experience	At least 3 years in economics, applied macroeconomic analysis, forecasting and briefing	2-5 years at the national level	7-10 years at a national level, or 4-5 years at international level
4. Knowledge	Statistical and econometric techniques for analysis and forecasting Financial and monetary economics Growth and stability pact	Principles and concepts of economics Analytical and research techniques	Principles and concepts of economics Analytical and research techniques Application to problems of national, regional and international economic development Organizational and programme context
5. Contacts	Horizontal coordination Representation, negotiation and participation Cooperate closely in the analysis and drafting of reports with colleagues Inter-institutional relations Official and private sectors in Member States International organisations Represent the Commission at meetings Contacts with EU institutions Other Commission services (especially Eurostat)	Internal reporting and communication Relations with national governments, other organisations and institutions Outside technical experts in related fields	Internal reporting and communication Relations with other UN organizations, officials of member governments, national institutions, non-governmental organizations, universities
6. Supervisory responsibility	None	None	Usual 4-8 professional staff comprising an organizational unit
TOTAL	100	50	75
	95.8		

Table 2: Retained comparison pairs

	EU occupation	Comparator organisation/occupation	
1	Planning and Programming Assistant	CERN	Process/Services Assistant
2	Engineer/Scientist	CERN	Applied Physicist
3	Accounting Assistant	ECB	Accounting Assistant
4	Economist	ECB	Economist
5	Head of Unit	ECB	Head of (small) Division/ Head of (large) Unit
6	Information and Communication Assistant	EIB	Operational Assistant
7	Economist	EIB	Economist
8	Head of Unit	EIB	Head of Unit
9	Human Resource Management Assistant	EPO	Administrative Employee Human Resources
10	Lawyer	EPO	Lawyer Legal Services
11	Head of Unit	EPO	Head of Department
12	Economist	ESM	Economist
13	Accounting Assistant	EuroControl	Administrative Assistant
14	Statistical Officer	EuroControl	Expert
15	Head of Unit	EuroControl	Head of Unit or equivalent
16	Information and Communication Assistant	OECD	Information and Communication Assistant
17	Engineer/Scientist	OECD	Engineer/Scientist
18	Head of Unit	OECD	Head of Division
19	Accounting Assistant	UN	Financial Assistant
20	Economist	UN	Economist
21	Head of Unit	UN	D1 (Unit Manager)
22	Human Resource Management Assistant	WTO	Human Resource Management Assistant
23	Translator	WTO	Translator
24	Head of Unit	WTO	Head of Unit

Indirect methods

Instead of matching salaries for selected jobs, indirect methods of assessing attractiveness are conceivable, although their feasibility depends on availability of data. For example, one approach would be to examine the numbers of applicants for similar advertised posts. A second approach would be to examine the number of departures. Are they higher in one organisation than others? A limitation with such approaches is that, whilst they do take the whole reward package into account, unlike wage differentials they cannot quantify the difference in attractiveness. [Nevertheless, availability of such data may be an interesting avenue for future research.](#)

An alternative to the job matching approach which has been proposed in academic literature might be to focus on job occupancy profiles. This “human capital” approach would instead attempt to identify people with similar characteristics (eg. gender, age, race, nationality, expatriate status, education, marital status, number of dependent children, contract status, hours worked per week). This would require access rights to compile and analyse detailed microdata for each participant organisation.

Conclusions

This paper has described the context for the 2014 pilot study and 2018 follow-up study to compare remuneration between international organisations, and has examined a fundamental quality element - namely the approach taken to ensure the comparison of “like-with-like”. Lessons from the limited number of earlier studies between international public sector organisations are implemented. Constraints are identified and solutions for future improvement proposed. A subsequent paper will examine phase II of the benchmarking exercise: the definition of salary used for the compilation of data from participant organisations.

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