

Ethnicity Pay Gap Reporting in the UK

A Briefing Note

Prepared for

For whom it may concern

On 12th September 2021

By

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Introduction

Parliament will be debating [Ethnicity Pay Gap Reporting \(EPGR\) at 4.30pm on Monday 20th September 2021](#). This is in response to [e-petition 300105 which calls for the introduction of mandatory EPGR](#). This is not the first such call for such legislation but whilst I have seen plenty of arguments in favour introducing EPGR, I have seen next to zero discussion of how EPGR could work. This is needed since any EPGR legislation cannot be a replica of the existing Gender Pay Gap Reporting (GPGR) legislation.

As one of the very few and possibly the only person to look at the practicalities of EPGR, I have formed an opinion of how this could work based on my expertise as a professional statistician who has spent 30 years working with non-statisticians in many different fields. This briefing note is intended to summarise my work in the field of EPGR, first as a set of 9 key points that have to be discussed before any legislation can be proposed and second as a summary of what I have been saying in my blogs since 2019.

There are 3 sections in this briefing note as listed below –

Section 1 - 9 Key Points to consider with Ethnicity Pay Gap Reporting (EPGR)

1. EPGR legislation cannot replicate current GPGR (Gender Pay Gap Reporting) legislation
2. There has been no public debate on the HOW of EPGR
3. If EPGR is mandated, the current GPGR legislation will need to be amended as well
4. I endorse recommendation 9 of the Commission for Racial & Ethnic Disparities (CRED) report
5. Employers should be free to use ethnic categories that are meaningful to their employees
6. Employees must be free to not declare their ethnicity
7. EPGR legislation must state a minimum category size for data to be reported
8. Legislation requiring mandatory EPGR should only apply to employers with 1,000+ employees
9. Voluntary EPGR by some motivated employers is better than mandatory EPGR with many issues?

Section 2 - List of blog posts I have written about Ethnicity Pay Gap Reporting

1. **June 2019** - [My evidence to the Treasury Select Committee on effectiveness of Pay Gap Reporting](#)
2. **July 2019** - [Should the UK introduce Ethnicity Pay Gap Reporting?](#)
3. **February 2020** - [How could the UK introduce Ethnicity Pay Gap Reporting?](#)
4. **November 2020** - [Why Employers should report their Ethnicity Pay Fingerprints.](#)
5. **June 2021** – [My 7+5 recommendations for amending pay gap legislation](#)
6. **August 2021** – [How many ethnic categories should an employer report?](#)

Section 3 - My background & experience

1. How I became interested in pay gap reporting
2. My Career
3. My Involvement with the Royal Statistical Society
4. My Academic Qualifications
5. My Social Media links (Professional only)

Section 1 - 9 Key Points to consider with Ethnicity Pay Gap Reporting

“ I am completely in favour of the principle of trying to assess ethnicity pay gaps ... I cannot recommend the replication of the gender pay gap process for ethnicity ... You must use a different angle.” [My evidence to the Treasury Select Committee on effectiveness of pay gap reporting, 5th June 2019](#)

I have written 5 articles since my 2019 testimony researching what *“a different angle”* for **Ethnicity Pay Gap Reporting (EPGR)** could be. Links to these articles on my blog are given in section 2 but I would like Ministers & MPs to bear these 9 key points in mind when considering EPGR legislation -

1. EPGR legislation cannot replicate the current GPGR (Gender Pay Gap Reporting) legislation

- i. [Ethnicity is a majority/minority concept with multiple categories which varies considerably by location](#) whereas gender is mostly binary with more or less equal numbers of men and women everywhere.
- ii. Many employers will have too few ethnic minorities on their payroll to report meaningful data simply because they are based in an overwhelmingly white area.
- iii. This is apparent just by considering a fictional employer with 1000 employees (red columns of table below) whose ethnicity profile exactly matches the 2011 census in England that used 18 ethnicities as defined by the Office of National Statistics (ONS18) which are also aggregated into the more commonly used *“Big 5”* and the binary *“White V BAME”*.

ONS 2011 Census broken down by Ethnicity - England

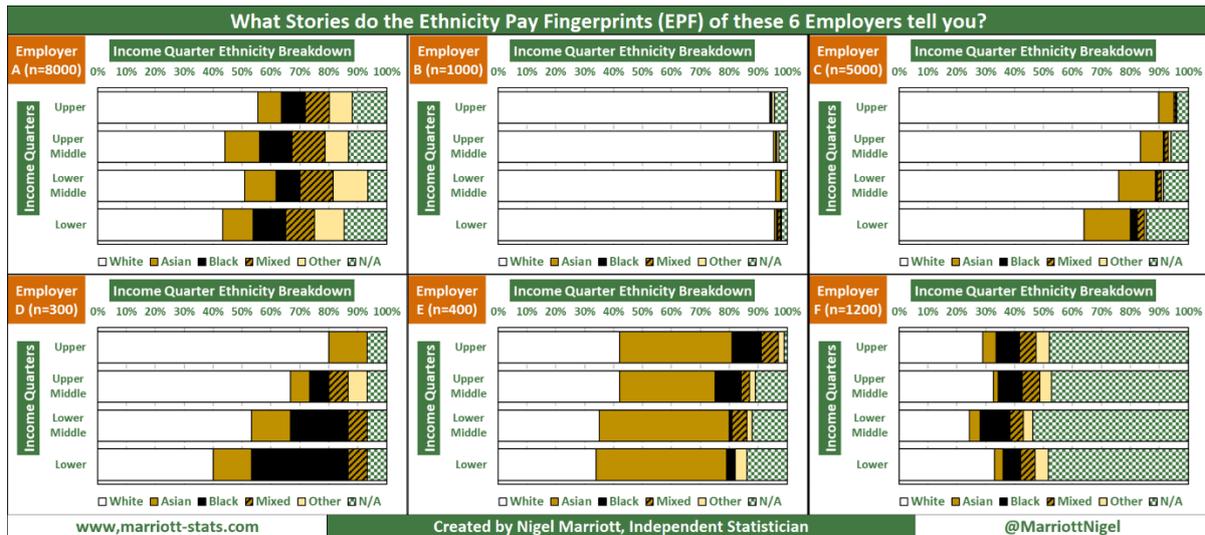
ONS18 Ethnicities	Census 2011	per 1,000	Big5	Census 2011	per 1,000	Binary	Census 2011	per 1,000			
White - British	42,279,236	798	White	45,281,142	854	White	45,281,142	854			
White - Irish	517,001	10									
White - Traveller	54,895	1									
White - Other	2,430,010	46									
Mixed - White+Black Caribbean	415,616	8	Mixed	1,192,879	23	BAME (Black & Minority Ethnic)	7,731,314	146			
Mixed - White+Black African	161,550	3									
Mixed - White+Asian	332,708	6									
Mixed - Other	283,005	5									
Asian - Indian	1,395,702	26	Asian	4,143,403	78						
Asian - Pakistani	1,112,282	21									
Asian - Bangladeshi	436,514	8									
Asian - Chinese	379,503	7									
Asian - Other	819,402	15									
Black - African	977,741	18	Black	1,846,614	35						
Black - Caribbean	591,016	11									
Black - Other	277,857	5									
Other - Arab	220,985	4	Other	548,418	10						
Other - Other	327,433	6									
ENGLAND	53,012,456	1,000	Total	53,012,456	1,000				Total	53,012,456	1,000

2. There has been no public debate on the HOW of EPGR

- i. As far as I am aware, I am the only person to have investigated in detail how an ethnicity pay gap system could work.
- ii. Many employers still struggle to do gender pay gap analysis properly and the extra complexity of ethnicity pay gaps means their struggles will be magnified.
- iii. I am currently auditing a random sample of 440 employer’s gender pay gap reports to measure how well or how badly they are doing and I expect to publish these results by the end of the year.

3. If EPGR is mandated, the current GPGR legislation will need to be amended as well

- i. It would be inefficient & confusing to require employers to use two different systems.
- ii. [I have made 7+5 recommendations for changes to the current GPGR system](#) which if made, would allow both GPGR & EPGR to follow the same system.
- iii. My main recommendation is that [the 4 pay quarters broken down by gender \(or ethnicity\) in the current system become the main focus of data reporting](#) since, as is hopefully obvious from the graphic below of 6 fictional employers, such data more or less tells the employer’s story.
- iv. Ideally, the term “pay gap” would also be replaced by “*representation gap*” since this is what pay gap analysis is all about, the gap in representation of various categories across the pay scale.



4. I endorse recommendation 9 of the Commission for Racial & Ethnic Disparities (CRED) report

- i. This calls for encouragement of employers that want to do EPGR, for the government to publish guidance on how to analyse ethnicity pay gaps and for employers who publish such reports to lay out reasons for any gaps and list actions they intend to take to close any gaps.
- ii. I also endorse CRED recommendation 24 to disaggregate the acronym BAME which means that employers reporting ethnicity pay gap data should be trying to avoid a simplistic White v BAME comparison and to analyse more granular ethnic categories instead such as ONS18 or Big 5.

5. Employers should be free to use ethnic categories that are meaningful to their employees

- i. Comparisons between employers using a standard set of categories is not the purpose of pay gap reporting in my opinion and therefore standardised categories across employers are not necessary.
- ii. [Employers’ focus should be on continuous improvement within themselves](#), not a league table competition between employers.
- iii. I advocate the use of open questions when asking employees for their ethnic identity since these days, it is much easier to process text and create ethnic identity clusters based on such responses rather than imposing a classification from above.

6. Employees must be free to not declare their ethnicity

- i. My experience tells me we can expect between 5% & 40% of employees to not disclose their ethnicity.
- ii. These Non-Disclosures should be reported as a separate category in any EPGR system as knowledge of how many people not declaring their ethnicity is insightful in my opinion.

7. Any EPGR legislation must state a minimum category size for data to be reported

- i. To ensure that no individual can be identified from published data, it is standard practice in social and market research not to report separately on categories with less than X employees.
- ii. X typically varies between 5 to 20 in my experience and I use 20 myself but this is a point where the Information Commissioner should be asked to comment on.
- iii. In 2019, [recommendation number 8 of the Royal Statistical Society's 10 recommendations for improving pay gap reporting](#) stated that any category with less than 100 employees should be flagged as potentially unreliable when being interpreted by non-statisticians in the public domain.
- iv. I have revisited this recommendation and I conclude it is still sound i.e. statistical robustness for interpretation in the public domain by non-statisticians requires a category size of at least 100.
- v. I recognise the public interest may lead to a trade off against statistical robustness but if parliament want to do this (for example setting the minimum at 50 say), they must require employers to seek expert advice from a statistician on whether their data is robust enough to be interpreted ([see option 1 of this link](#)) and flag figures deemed not to be robust.

8. Legislation calling for mandatory EPGR should only apply to employers with 1,000+ employees

- i. A detailed analysis of possible employer ethnicity profiles shows [the best case scenario for EPGR is that 4 out of 5 employers with 1000+ employees](#) will be able to report 3+ ethnic categories containing 50+ employees.
- ii. This proportion falls rapidly with smaller employers with only 1 in 10 employers with 250-499 employees able to do this.
- iii. This table assumes the Big 5 are the ethnic categories used but if ONS18 ethnicities are used instead, more employers will be able to report 3+ categories but for the majority of these additional employers, the most common comparison will be White British v White Other v BAME.
- iv. This is because White Other is the 2nd largest ethnicity after White British (see table shown in point 1) and based on EU citizens settlement applications as of July 2021, I would not be surprised if the White Other population doubles once the 2021 census figures are published.

Expected Outcome of UK Ethnicity Pay Gap Reporting				
Minimum #Employees per Category	#Employees Declaring Ethnicity	% Unable to report White v BAME	% Reporting White v BAME only	% Reporting White v 2+ Categories
>= 20	250-499	55%	16%	29%
	500-999	11%	17%	73%
	1000-4999	0%	5%	95%
>= 50	250-499	82%	6%	11%
	500-999	38%	29%	34%
	1000-4999	7%	9%	85%
>= 100	250-499	92%	5%	3%
	500-999	77%	13%	11%
	1000-4999	18%	17%	65%

Based on analysis of 676 fictional employers created using ONS 2011 Census data for England only at 3 geographical levels - Parliamentary Constituencies, Lower Tier Local Authorities and Administrative Regions
RED denotes undesirable outcome, GREEN denotes desirable outcome

9. Voluntary EPGR by some motivated employers is better than mandatory EPGR with many issues?

- i. When [I called for mandatory EPGR in my CRED submission](#), I assumed Big 5 categories would be used.
- ii. It was presumptuous to ignore other possible categorisations and combined with a recent in-depth analysis of the 2011 census, I now realise I underestimated the statistical & data issues with EPGR.
- iii. As a professional statistical consultant, I stand to gain financially from a mandatory system with flaws since that would almost certainly lead to HR departments around the UK being unable to work out what their data is telling them and then searching for someone like me who can help them.
- iv. However, [I am under a professional obligation as a Chartered Statistician of the Royal Statistical Society](#) to have the public interest in mind when making public statements like this briefing note.
- v. Given the list of issues highlighted, I can see a benefit in a voluntary system where EPGR is undertaken by motivated employers and this opportunity is used to design a mandatory EPGR system.

Section 2 - List of my blogs about Ethnicity Pay Gap Reporting

Here is a list of blogs I have written relating to ethnicity pay gap reporting. They are listed chronologically so that you can see how my thinking has evolved over time.

1. **June 2019** - My evidence to the Treasury Select Committee on "[Effectiveness of Gender Pay Gap Reporting](#)". The last question was about Ethnicity Pay Gaps.
2. **July 2019** - [Should the UK introduce Ethnicity Pay Gap Reporting?](#) I list the statistical, data and ethical challenges that have to be overcome before EPGR can be introduced
3. **February 2020** - [How could the UK introduce Ethnicity Pay Gap Reporting?](#) I explore 5 different ways EPGR could be introduced to overcome the barriers listed in the previous post and whilst I stated a preference for the 5th option, I knew that there were still barriers to overcome.
4. **November 2020** - [Why Employers should report their Ethnicity Pay Fingerprints](#). My submission to the CRED commission demonstrating why breaking down the 4 pay quarters by ethnicity is the simplest and most insightful way of summarising an employer. This was the moment when I realised that the standard mean & median pay gap calculations needed to be abolished and by focusing on pay quarters, it would be possible for employers of sufficient size to report ethnicity data. However, I automatically assumed that the Big 5 ethnicities would be the categories used.
5. **June 2021** – [My 7+5 recommendations for amending pay gap legislation](#). I list 7 recommendations for changing the way employers report their pay gaps (front end) and 5 recommendations for changing what data they have to use in their calculations (back end). Whilst the blog focuses on gender, I wrote the blog with the intention that the amended legislation could also be used for ethnicity provided some issues specific to ethnicity in recommendation 2 were addressed.
6. **August 2021** – [How many ethnic categories should an employer report?](#) I address the issues relating to ethnic categories relevant to recommendation 2 of the above post. I look at what categories could be used, how an employer could decide which ones to use, what the minimum number of employees per category should be. Most importantly, I created 676 fictional employers based on the 2011 census to estimate what percentage of employers would be able to report multiple ethnic categories.

Since I now recommend gender, ethnicity & other characteristics are reported on using the same reporting system, many of my other blogs are also relevant even if the article focuses on gender. For a complete list of all my blogs about pay gaps and diversity, [please visit this list of articles grouped by theme](#). The full list of themes in that link is given below.

- A – Finding pay gap data in the UK**
- B – Understanding pay gap data**
- C – Detecting errors in pay gap data**
- D – Improving pay gap reporting**
- E – Closing your pay gap**
- F – Finding pay gap data for other countries**
- M – Miscellaneous posts related to pay gaps**
- T – My tweets about pay gaps**
- V – Archived material**

Section 3 - My Background & Experience

How I became interested in pay gap reporting

I started to take a professional interest in the statistics of pay gaps and diversity when GPGR became mandatory for all employers with 250 or more employees in 2017. I knew from my experience of working with non-statisticians that HR professionals were the most likely to be tasked with producing and analysing pay gap data for their employers. I also knew that HR professionals would struggle to analyse and interpret data and I decided to offer my services. Before long [I was also blogging about statistical issues with pay gaps](#) and realised that the situation had been complicated by issues with the primary legislation (Equality Act 2010).

This is not the first time I have submitted evidence on matters to do with pay gaps and diversity. In June 2019, I was asked to give evidence to the [Treasury Select Committee on “Effectiveness of Pay Gap Reporting”](#). My evidence that day was both in my personal capacity as an independent statistician and as a representative of the Royal Statistical Society. I was asked 9 questions in all and the last concerned Ethnicity Pay Gap Reporting which led to the comment I used to begin this briefing note.

My Career History

- 2006- : **Marriott Statistical Consulting Ltd**, Bath, Somerset
- 1997-2006: **Mars UK Ltd**, Slough, Berkshire
- 1991-1997: **ED&F Man Ltd**, Sugar Quay, London
- 1989-1990: **UK Atomic Energy Authority**, Harwell Laboratories, Oxfordshire
- 1986-1987: **British Gas Plc**, Cramlington, Northumberland

I am an independent statistician based in Bath, UK and my professional career spans nearly 30 years. The first half of my career was spent working in a wide variety of roles in the food industry. Since 2006, I have provided consultancy and training services to over 150 clients across 10 countries through my company [Marriott Statistical Consulting Ltd](#). For a fuller description of my career, please visit [my LinkedIn profile](#).

I would like to point out two features of my career. First, I specialise in providing services to non-statisticians in every industry who struggle with analysing data in their day job. The effect of this is that I am not beholden to any particular industry sector and I can genuinely provide independent advice. Second, I repeatedly receive positive feedback about my ability to explain complex statistical topics to a non-statistical audience and this is one of the reasons [I blog about a wide variety of issues](#) in the public domain.

My Involvement with the Royal Statistical Society

- 2018-2021: Appointed as member of **Diversity & Inclusion** committee
- 2019-2020: Elected as Secretary of **Quality Improvement Section**
- 2015-2018: Elected as Chair of **Quality Improvement Section**
- 2013-2017: Elected as member of **Professional Affairs Committee**
- 2008-today: Approved as a provider of foundational **Statistical Training Courses** under the RSS banner
- 2003-today: Accredited as **Chartered Statistician (CStat)**
- 2001-today: Admitted as **Fellow of Royal Statistical Society (RSS)**.

I have been a member of the Royal Statistical Society (RSS) for 20 years and I [am accredited by them as a Chartered Statistician \(CStat\)](#). This is an assurance that I have the relevant professional qualifications, I am

committed to continuous professional development and that I apply the RSS Code of Conduct in all of my professional affairs. **For avoidance of doubt, what I have written in this document is my personal opinion only and not the opinion of the RSS.**

My Academic Credentials

- 1997: **MSc Applied Statistics & Operational Research**, Birkbeck College, University of London.
- 1991: **BSc (Hons) Mathematics**, University of Bath.

My Social Media Links (Professional Only)

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