



Adverse Impact Analysis - Overview

OVERVIEW

Most commonly, adverse impact is identified when numerical data reveals that a group of people (categorized by gender or race/ethnicity) was affected in a negative manner by a facially neutral employment practice, procedure, or test. Once adverse impact is identified, courts and compliance agencies can assume discrimination unless the employer can prove that the practice, procedure, or test causing the adverse impact is valid (i.e., job-related and justified by business necessity).

AGENCIES REQUIRING ADVERSE IMPACT ANALYSES

Analyses of selection procedures in order to identify the presence of adverse impact are required of

1. employers with 100 or more employees, per the Uniform Guidelines on Employee Selection Procedures (41 CFR 60-3, 29 CFR 1607);
2. employers required to have written affirmative action programs for minorities and women by the Department of Labor's Office of Federal Contract Compliance Programs (OFCCP) (41 CFR 60-2.17[b][2]); and,
3. California employers who are state contractors required to have written Nondiscrimination Programs for minorities and women by the Department of Fair Employment and Housing's Office of Compliance Programs (OCP) (California Code of Regulations, Title 2, Division 4, Chapter 5, Section 8104[a][4][A]).

WHEN TO CONDUCT ANALYSES

1. The Uniform Guidelines require adverse impact analyses at least annually.
2. OFCCP expects annual analyses as part of affirmative action plan updating and monitoring. When OFCCP audits a federal government contractor, it requires the contractor to submit personnel activity data (hires, promotion, terminations) for the previous AAP year and the current AAP year if the contractor is six months or more into the AAP year.
3. OCP requires annual analyses from state contractors with Nondiscrimination Programs.
4. Biddle Consulting Group recommends adverse impact analyses be conducted once a year, at a minimum. Additionally, analyses should be conducted regularly
 - a. after each selection procedure with sufficient sample,
 - b. during some portions of selection procedures (e.g., comparing pass rates on a written test), and
 - c. over a period of time to combine selection procedures to identify patterns of adverse impact, especially when the sample size is too small to do so during shorter time periods.

FOR WHOM?

Regardless of the methodology used to analyze the numbers involved in adverse impact analyses, the data is analyzed for men and women separately from the data for minority groups and non-minorities. The groups evaluated are typically those identified in Section 4D of the Uniform Guidelines: men and women, whites, blacks, Hispanics, Asians/Pacific Islanders, and American Indians/Alaskan Natives. Data may also be evaluated for minorities in the aggregate as compared to non-minorities (whites). Some courts have allowed analyses for a specific gender by race (e.g., black women).

According to the Uniform Guidelines, calculations must be made for men, women, and each minority group comprising 2% or more of the labor force in the relevant area (the employer's own workforce or the external labor force).

Note: The Uniform Guidelines require maintaining applicant flow data by gender within each race/ethnic group (e.g., black men, black women), although adverse impact analyses are required only for the total race/ethnic group without regard to gender. (Questions and Answers #17 and #87, Uniform Guidelines on Employee Selection Procedures)

JOB CLASSIFICATION OR JOB GROUP?

1. The Uniform Guidelines require the analyses by job classification.
Exception: When an employer uses a test or other selection procedure to select persons for a number of different jobs, the impact of the test should be assessed in the aggregate. Therefore, if a test or selection procedure is administered and used in the same fashion for a variety of jobs, the applicants should be grouped together for analysis as if it were one job. (Question and Answer #27, Uniform Guidelines on Employee Selection Procedures)
2. OFCCP accepts adverse impact analyses by job classification or by job group.
3. Biddle Consulting Group recommends analyses be conducted by job classification and, if the employer is a federal government contractor, that the analyses also be conducted by job group. Employers which are not federal government contractors subject to OFCCP may wish to conduct analyses by job group for affirmative action purposes to identify and resolve problem areas inhibiting full utilization of minorities and women.
4. The steps below describe how to collect data and conduct analyses by job classification. To conduct the analyses by job group, simply collect the required data and consolidate it into appropriate job groups. For example, if job classifications X, Y, and Z comprise Job Group #1, collect data for classifications X, Y, and Z and combine it to be used for the job group analysis.

WHICH ACTIVITIES?

1. The Uniform Guidelines require analysis of any selection procedure used to make an employment decision including hiring, retention, promotion, transfer, demotion, dismissal, or referral (Section 2B and Question and Answer #6)
2. OFCCP requires data on and/or analysis of hires, promotion, and terminations, at a minimum.
3. OFCCP requires an analysis of each step in selection procedures including but not limited to applications for employment, hiring, promotions, transfers, lay-offs, recall, and terminations.

4. Biddle Consulting Group recommends analyses, at a minimum, of hires, promotions, and involuntary terminations. In addition, analyses should be conducted on any other activity likely to have an adverse impact if more than five employees/applicants were involved in the procedure.
5. Additional areas for analysis not mentioned above could include: recruitment effectiveness (not covered by Uniform Guidelines), discipline, merit pay increases, training/apprenticeship program participation, tenure, and reclassification.

AVAILABILITY DATA

Some of the analyses described below require availability data. If the analysis is conducted by job group, use the availability for the job group found in the Affirmative Action Plan. If the analysis is conducted by job classification, use either the job group availability or obtain data specifically for the individual classification (Census occupation data and/or internal feeder pool data).

HIRING ANALYSES (TOTAL PROCESS)

DATA NEEDED

1. The number of applicants by gender and race/ethnic group for each job classification (or job group).
2. The number of applicants by gender and race/ethnic group who were hired for the job classification.

WHO IS AN APPLICANT?

1. The Equal Employment Opportunity Commission (EEOC) and the Office of Federal Contracts and Compliance Programs (OFCCP) operationally define "Who is an Applicant" differently. EEOC uses the existing definition of applicants found as item 15 in the Questions and Answers of the Uniform Guidelines on Employee Selection Procedures (UGESP). It states,

The precise definition of the term "applicant" depends upon the user's recruitment and selection procedures. The concept of an applicant is that of a person who has indicated an interest in being considered for hiring, promotion, or other employment opportunities. This interest might be expressed by completing an application form or might be expressed orally, depending on an employer's practice. A person who voluntarily withdraws, formally or informally, at any stage of the selection process is no longer an applicant for purposes of computing adverse impact.

On February 6, 2006, the final rule on the "Definition of an Internet Applicant" was published in the Federal Register. According to the OFCCP's definition, an individual will only be considered an applicant if he/she meets the following four (4) conditions:

- a. *The individual submits an expression of interest in employment through the Internet or related electronic means.*
- b. *The company considers the individual for employment in a particular position.*
- c. *The individual's expression of interest indicates that he or she meets the basic qualifications for the position.*

- d. *The individual at no point in the recruitment process (prior to receiving an offer of employment) indicates that he or she no longer is interested in the position.*

The main intent of the final rule was to better define who is an applicant for OFCCP's recordkeeping and analysis purpose. It was not intended to differ, in any way, from the EEOC's definition. In essence, the OFCCP's applicant definition provided clearer guidelines for contractors/sub-contractors on how to better manage a huge pool of job seekers which is a result of technological advancements that make it easier to apply for jobs, retain appropriate records, and solicit race and gender information.

2. Regardless of the source of referral, the contractor is obligated by 41 CFR 60-3.4 and 3.15 (and also by 41 CFR 60-2.17(b)(2) and 60-2.17(b)(4)) to maintain applicant flow data, by gender and minority group, on all applicants for each job. This includes referrals from search firms and employee referrals, as well as persons responding to more traditional advertising, walk-ins, etc. (Section 4H02, Chapter 4 [Corporate Management Compliance Evaluations], OFCCP Contract Compliance Manual)
3. For record keeping purposes, an applicant means any individual who files a formal application or, where an employer does not provide application forms, any individual who otherwise indicates to the employer a specific desire to be considered for employment. An individual who simply appears to make an informal inquiry or who files an unsolicited resume upon which no employment action is taken is not an applicant. (California Fair Employment and Housing Commission, 2 California Code of Regulations, Division 4, Section 7287.0[b][1])

COMPONENT ANALYSES

WHAT ARE COMPONENT ANALYSES?

The Uniform Guidelines on Employee Selection Procedures require an analysis of selection procedure components when:

1. the total selection process for a job classification has an adverse impact, or
2. the selection procedure is a significant factor in the continuation of patterns of assignments of incumbent employees caused by prior discriminatory employment practices, or
3. where the weight of court decisions or administrative interpretations hold that a specific procedure such as a height/weight requirement or no arrest record is not job related in the same or similar circumstances, or
4. in unusual circumstances other than those above, when federal enforcement agencies request an evaluation of individual components for adverse impact.

Additionally,

1. the U.S. Supreme Court ([Connecticut v. Teal](#)) has held that neither a favorable hiring mix nor a favorable racial balance in the employer's workforce can be used as a defense when one step in the selection process adversely impacts a protected group.
2. Biddle Consulting Group also recommends that adverse impact analyses be conducted on each step in every selection process when the data is available and shows that at least five participants dropped out of the comparison step (e.g., 50 applied and 45 or fewer were determined to be minimally qualified; 77 took a written test and 72 or fewer passed).

- most component analyses are conducted on external hiring procedures. However, some promotional procedures are structured in such a way that several steps involved can be analyzed. The analysis is useful only, however, when sufficient numbers of people are involved to make the analysis meaningful. Generally, this is not the case with most employers. Typically, they have only a few employees actually applying for a promotion and going through specific, standardized steps that can be analyzed.

DATA NEEDED FOR COMPONENT ANALYSES

- The number of applicants by gender and race/ethnic group who participated in each step in the selection procedure for a job classification (or a job group).
- The number of applicants by gender and race/ethnic group who completed each step in the selection procedure for a job classification (or a job group).

GETTING THE DATA FOR COMPONENT ANALYSES

- Use an applicant monitoring system to track applicants through each step of the selection procedure. See the sample below.

Req. No.	App. No.	Application Rec'd.	Written Test	Interview 1	Interview 2	Offer Made	Hired
123	34535	1/23/2012	1/27/2012	2/15/2012			
123	34536	2/5/2012	2/15/2012				
123	34537	2/14/2012	2/15/2012	2/19/2012	3/19/2012		
123	34538	3/8/2012	3/12/2012	3/15/2012	3/19/2012	3/20/2012	3/20/2012
123	34539	3/10/2012	3/12/2012				

- The first line under the starting column and the last line under the completing column on the sample (see below) provide the data that is analyzed in the total selection process, described in the previous section, "Hiring Analyses." The remaining data is what is used to evaluate the components in the selection procedure.

Steps	Starting	Completing
1. Basic Qualifications	Male - 100	Male - 79
	Female - 100	Female - 77
2. Test	Male - 79	Male - 65
	Female - 77	Female - 35
3. Invited for Interview	Male - 50	Male - 45
	Female - 30	Female - 15

4. Interview	Male - 45	Male – 35
	Female - 15	Female - 10
5. Final Selection	Male - 35	Male – 30
	Female - 10	Female - 5

- Note that each and every step of the selection procedure is provided on the form. Do not omit steps such as "Invited to Interview." This information is crucial in the evaluation because it is precisely at this point that the employer might lose a significant number of applicants from the selection procedure which may, in fact, account for a finding of adverse impact in the total selection process. In such a case, when applicants were invited to participate in a step (written test, interview, etc.) and did not show up, adverse impact did not result from an employment practice, procedure, or test so long as the employer had done nothing to discourage the applicants.

PREPARING DATA FOR COMPONENT ANALYSIS

- Identify each set of data that will be entered into the program. A set of data will consist of two adjoining steps in the selection procedure.
- Compare the first step's data against the second step's data to ensure that some applicants were dropped from one step to the next. If no applicants were dropped (failed, did not show up, etc.), then obviously no analysis of those two steps is necessary since they could not possibly have an adverse impact on any group.
- Continue through the remaining steps, comparing the second step to the third; the third step to the fourth; the fourth step to the fifth, etc. to identify each set of data that will be evaluated.

PROMOTION ANALYSES

DATA NEEDED

The data needed to conduct promotional analyses will vary depending upon the type of procedures used. There are three techniques that can be used for evaluating the adverse impact of promotions.

Guidelines Technique (Applicants for Promotion)

The advantage of this technique is that it follows the method found in the Uniform Guidelines. The disadvantage is that most employers do not have sufficient numbers of actual applicants for promotion to use this technique.

- The number of applicants for promotion by gender and race/ethnic group for each job classification (or job group).
- The number of promotions into the job classification (or job group) by gender and race/ethnic group.

3. Availability data: those eligible for promotion. Typically, this data identifies all employees working in appropriate feeder classifications. Such data may be further refined by identifying within that pool only those employees who meet minimum promotion requirements.

Feeder Job Technique (Eligible, But Did Not Apply)

The advantage of this technique is that data collection can be made easy, depending upon the precision with which those "eligible" are identified. However, that is also the disadvantage. If all employees working in a feeder job classification are considered eligible, data collection may be simple; however, the assumption that all feeder employees are qualified and interested in the promotions being evaluated is probably faulty.

1. The number of those eligible by gender and race/ethnic group for promotion into a specified job classification (or job group) from that job's (or job group's) feeder jobs. This may be as simple as using the Internal Factor data from an Availability Analysis, the final availability for an entire job group, or those working in specific feeder classifications.
2. The number of promotions into the job classification (or job group) by gender and race/ethnic group.

Blocking Technique

The advantage of this technique is that it allows a way to evaluate promotions when there are no actual applicants for promotion and so the Guidelines technique cannot be used. This technique also closely resembles a method used by OFCCP. The disadvantage is that it is difficult to collect the data required and that, once the analysis is conducted, sometimes the results are not useful. The Blocking technique shows only that minorities or women are or are not thwarted in their attempts to move up and out of a job classification (or job group). If adverse impact is found, appropriate corrective action may not always be possible if many unrelated selection procedures are involved.

1. The number of those by gender and race/ethnic group in a job classification (or job group) on the first day of the relevant time period, plus (added to that figure) all those by gender and race/ethnic group who entered into that job classification (or job group) after the beginning date and during the time period being analyzed (which is usually a one-year period) by any means such as hires, promotions, transfers, demotions, etc. This number will identify who was "in" a specific job classification (or job group) and, therefore, those who could have been promoted out.
2. The number of those by gender and race/ethnic group actually promoted from that job classification (or job group) during the relevant time period. This is not an analysis of who was promoted into a job classification (or job group); rather, it is an analysis of who was promoted out of a classification (or job group). This technique suffers from the criticism that it does not measure the adverse impact of the selection procedure. But, it does measure the adverse impact of "blocking." Blocking indicates whether or not proportionate numbers of men and women and race/ethnic groups are receiving promotions from a specific job classification (or job group). Another criticism of this process is that different selection procedures are probably being used to evaluate the employees in that classification (or job group) for promotion into a variety of different classifications (or job groups). The Blocking technique does not address that issue.

However the Blocking technique is sometimes necessary because the Guidelines technique or the Feeder Job technique cannot be used. The Guidelines technique often cannot be used because there are not sufficient numbers of applicants for promotion into a specific classification (or job group). The Feeder Job technique suffers from the same problem and, in addition, there is the problem of properly identifying those who are eligible for promotion into a specific classification (or job group).

INVOLUNTARY TERMINATIONS (RETENTION ANALYSES)

DATA NEEDED

1. The number of those by gender and race/ethnic group who were employed in the job classification (or job group) as of the first day of the relevant time period, plus (added to that figure) all those who came into that job classification (or job group) during the time period being analyzed (which usually is a one-year period) by any means, including hiring, promotion, transfer, demotion, etc. This number constitutes all those "in" the target job classification (or job group) and, therefore, those who could be retained.
2. The number of those in item 1, above, minus those involuntarily terminated from the job classification (or job group), by gender and race/ethnic group. The difference between the two sets of figures for any given gender or race/ethnic group will identify those involuntarily terminated during the time period.

DEFINE INVOLUNTARY TERMINATIONS

1. Identify the terminations you are considering "involuntary" for adverse impact purposes. The list should include such actions as firing, layoffs, and for quits due to problems with supervisors, management policies, or pay, etc.
2. Do not include terminations due to retirement, death, moves to a new location, or quits for a better job opportunity elsewhere.

INTERPRETING RESULTS OF ANALYSES

80% OR FOUR-FIFTHS RULE OF THUMB TEST

The 80% test is based on a simple comparison of two groups' selection rates (e.g., a comparison of two groups' hiring rates or passing rates on a test). The 80% test is explained in the Uniform Guidelines and in its supplemental interpretation and clarification of the Uniform Guidelines (Questions and Answers). The 80% test is violated (and adverse impact is assumed, if only the 80% test is being used) when a group's selection rate is less than 80% of the selection rate of the group which had the highest selection rate. It is important to note that the 80% test is a "rule of thumb," designed to allow a compliance agency to easily find an employment area on which to focus its attention during investigations; the 80% test is not a legal definition of adverse impact. Biddle Consulting Group's adverse impact analyses include, but do not rely on, the 80% rule of thumb test.

STATISTICAL SIGNIFICANCE TESTS

Statistical significance tests are a more appropriate way to identify adverse impact than by using the 80% test. Statistical significance tests answer the question: "Is the difference between the observed

situation and the expected situation caused by chance or did something other than chance (e.g., discrimination) cause the difference?"

Statisticians and EEO consultants usually draw conclusions of statistical significance when the significance test results in a standard deviation of 1.96 or higher. (Some EEO case law has established a more conservative level of 2.00 to 3.00 standard deviations.)

When the standard deviation is 1.96, the probability that the difference between the observed and the expected situation occurred by chance alone is .05 (one chance in 20). This means that 19 times out of 20, something other than chance is causing the difference. As the standard deviation increases (1.97, 2.45, 4.78, etc.), the probability that the difference occurred by chance decreases (.04, .03, .01, .007, etc.).

Statistical Significance: Guidelines Analysis

The "Guidelines Analysis" is one of two methods Biddle Consulting Group uses to evaluate statistical significance. This method is based on the requirements of the Uniform Guidelines. The analysis compares the selection rates (e.g., hire rates, promotion rates, retention rates, passing rates, etc.) of two groups: the group that has the highest selection rate and another group. The Guidelines Analysis is a two-sample statistical test.

Statistical Significance: Hazelwood Analysis

The "Hazelwood Analysis" is the second of two methods Biddle Consulting Group uses to evaluate statistical significance. It is based on the U.S. Supreme Court case of U.S. v. Hazelwood School District. This method is a one-sample test which compares a pool of people (e.g., the pool of those hired or promoted or a pool of applicants) to their availability percentages, which are often found in Affirmative Action Plans.