KPMG Meijburg & Co
Tax & Legal

# The significance of statistical sampling for Tax Control

March 2026

# 1. General

## Tax risks are material

The amount of tax payable in relation to the overall scale of a business' operations is significant, as are the risks associated with these taxes. As a result, business are increasingly asking themselves: "Are we adequately managing the risks associated with our tax positions?" And if they do no themselves, the Dutch tax authorities certainly will.

## Controlling tax risks is important

To manage tax risks effectively, organizations can implement a Tax Control Framework (TCF). The aim of a TCF is to detect and correct tax errors in primary processes and transactions at an early stage, before they would end up in a tax return.

## Auditing control measures is difficult

Assessing whether these control measures are (or have been) effective is a major challenge. Given the large volume of business transactions, it is simply impossible to review every individual transaction. This brochure therefore explains the role and importance of statistical sampling in determining the effectiveness of tax controls.

# 2. Where does statistical sampling fit into Tax Control?

Before delving deeper into random sampling, we will first explain at which stage it can be applied within the approach Meijburg & Co has developed for implementing and maintaining a Tax Control Framework.

### The baseline measurement

Statistical sampling can be used to gain insight into tax risks embedded in business processes. Random sampling identifies the material tax risks arising from the processing of transactions, including their financial impact and underlying root causes.

### Operation of control measures

During the baseline measurement, statistical sampling can also be used to test whether control measures exist and whether they are operating effectively..

### Organizational aspects of a TCF

A similar assessment can be performed during the maintenance phase to test whether the organization-oriented aspects of the TCF exist and operate effectively.

### Data-oriented assessment

In the maintenance phase the data-oriented assessment of the quality of the filed tax returns can also be supported by statistical sampling.

### Retrospective or continuous monitoring

This assessment can be carried out **retrospectively** over a longer period (for example annually or every two years) or periodically (every month, quarter, or six months) as a part of a **continuous monitoring process**.

# 3. What is statistical sampling?

### Statistical sampling: definition

Statistical sampling is structured method of critical examination.

What distinguishes it is that the selection of the sample population is entirely random. Because of this objective selection process, statistical sampling makes it possible to draw reliable conclusions to the entire targeted population by examining a smaller, representative subset of data.

Naturally, the statistical pre-conditions must be met. For example, depending on the required level of reliability and accuracy, a minimum number of observations (sample items) is necessary.

### Types of statistical sampling

There are several forms of statistical sampling. In this brochure we focus on two common methods: record sampling and monetary unit sampling.

These methods are most commonly used in the context of tax control. Whether record sampling or monetary unit sampling is applied depends on the type of inference that is required.

### Record sampling

Record sampling provides insight into the qualitative characteristics of the items in the population. The results are expressed as a percentage of the total number of items in the population. A population is considered acceptable if a predetermined maximum error percentage is not exceeded. The error projection is also expressed as a percentage. For example: “0.35% of all outgoing invoices contain an incorrect VAT rate.”

Record sampling is used in tax risk analysis to assess the quality and effectiveness of control measures, as well as in formal audits, when reviewing compliance such as VAT invoice requirements.

## Monetary unit sampling

Record sampling is insufficient when a monetary conclusion is required. For example, knowing that 0.35% of the outgoing invoices contain an incorrect VAT rate does not reveal anything about the amount involved. Monetary unit sampling revolves this, as the results of this type of sampling are expressed in euros. A population is accepted if the sample shows that a predetermined maximum monetary error has not been exceeded.

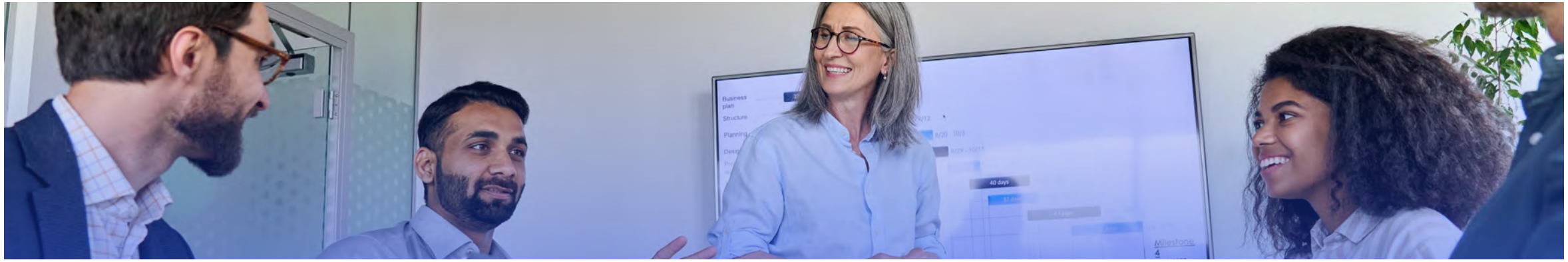
The error projection represents the expected monetary error in the entire population. Monetary unit sampling is used when analyzing populations expressed in monetary terms, such as orders, invoices, or tax returns.

## Approval threshold = materiality

Statistical sampling uses an approval threshold, also referred to as 'materiality'. The population is considered 'good enough' if the sampling results show that no material error is present. The material amount can either be determined by the organization itself, or derived from the materiality table applied by the Dutch tax authorities. If the population cannot be accepted because it contains a material error, it can be corrected ('cleaned up') based on the the sample findings.

## Sample size always the minimum necessary

The sample size represents the minimum number of 'good' observations required to conclude that the population does not contain a material error. This makes statistical sampling highly efficient: no more work is performed than strictly necessary. This approach contrasts with other types of sampling or testing, where the question whether enough work has been done can almost never be adequately answered.



# 4. Statistical sampling in stages

Meijburg & Co's experienced specialists follow a structured and proven approach when performing statistical sampling. The methodology consists of the following stages:

a. Prepare the statistical sampling
b. Define the population
c. Draw the sample
d. Gather supporting documentation
e. Audit the selected items
f. Evaluate the findings
g. Complete the sampling

### Prepare the statistical sampling

A key characteristic of statistical sampling is that the required reliability level and materiality level are determined in advance. These parameters form the foundation for the sample design and influence both the required sample size and the conclusions that can be drawn.

The preparatory stage also involves defining the population, determining the scop of the audit, specifying error conditions and identifying the supporting documents required.

Making these elements explicit is a key distinction from ordinary sample testing.

All stakeholders are subsequently informed what will be done, for what purpose, how the process will be carried out and on what basis. If the Dutch tax authorities are involved in the sampling, they will of course also be informed of this.

The preparation results in a detailed work plan and clear allocation of responsibilities.

### Define the population

Experience shows that statistical sampling can be carried out efficiently when the population is available digitally.

Given the advanced level of digitalization within most organizations, this seldom poses a problem.

### Obtaining the sample population requires a careful approach

Before working with the data, we reconcile it with the financial accounts and/or tax returns, to ensure that the sampling focusses on the correct dataset. We typically request both a description of the records and an explanation of the data, to eliminate any uncertainty about its meaning.

Requesting, converting and reconciling data may seem straightforward. However, in practice, errors frequently occur at this stage for variety of reasons. For this reason, we devote extra attention to this phase to ensure that the sampling starts for an accurate and reliable dataset.

### Draw the sample population

We use ACL ('Audit Command Language') software to draw the sample. This software is widely used by audit firms, corporations and government bodies.

A key advantage of ACL is that all actions are automatically logged. This ensures that the entire sampling process can be demonstrated and reproduced in detail if necessary.

Drawing the sample results in a sample list. This list contains all relevant information required to locate supporting documentation and shows the records to be audited (the 'book values') of the selected transactions.

### Gather supporting documents

Before the audit can begin, the relevant supporting documents must be collected. The sample list includes references such as order numbers, invoice numbers and similar identifiers that can be used to trace supporting documents within the accounts and/or archives. We can gather and organize these documents for you, but you may also choose to do it yourself.

## Audit the drawn items

The actual audit consists of verifying the accuracy of the recorded values of the selected transactions (the 'book values) by comparing them with the supporting documents related to those transactions (the 'audit values').

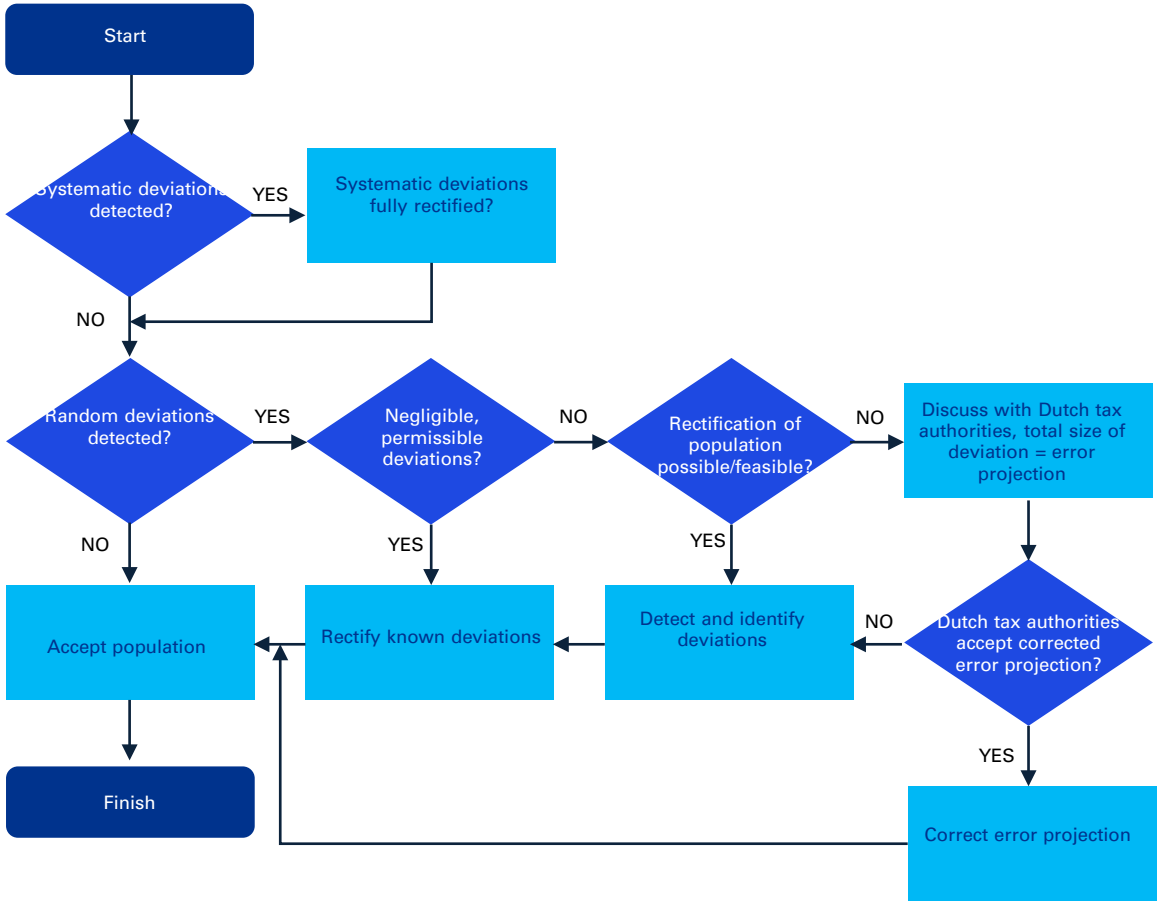
For example, consider the audit of whether the VAT zero rate has been correctly applied on exports: the accounting records and VAT return may show that the zero rate was applied to certain transactions, but the supporting documents (such as freight documents, payment evidence, etc.) must demonstrate that the conditions for applying the zero rate were in fact met. The audit of the sample items may be performed by the organization itself or by Meijburg & Co's tax specialists.

If deviations are detected, these are documented and discussed with you. The underlying cause each deviation is analyzed, so that, in the case of systematic deviations, corrective measures can be taken to prevent them in the future.

## Evaluate the findings

Determination whether a deviation is systematic or random is essential for evaluating of the results. Systematic deviations can be isolated from the population and fully corrected. Because they are fully quantifiable, the impact of systematic deviations can be established with complete certainty and accuracy.

The evaluation of the sampling focusses only at the random deviations. Using statistical calculations, the various errors relevant to the evaluation are quantified. The decision model used in the context of the evaluation is as follows:



### Complete the sampling

The final activities in completing the sampling include preparing a report that summarizes the findings, conclusions and recommendations arising from the sampling. In addition, to the quantitative analysis, the underlying causes of the identified deviations are examined so that you can begin implementing corrective measures.

### The Dutch tax authorities can rely on our work

If desired, the report can also be discussed with the Dutch Tax Authorities. Because their monitoring activities build directly on the sampling performed, we ensure that a robust and well-documented file is compiled. The underlying principle is that the Dutch tax authorities should not repeat the work we have already carried out.

# 5. Summary

In the context of Tax Control, statistical sampling is carried out during both the insight and maintenance stages. Record sampling focuses on the qualitative aspects of control measures, while monetary unit sampling is used to examine populations expressed in monetary terms.

For every statistical sample, the starting point is acceptance. The sample size represents the minimum number of ‘good’ observations required for acceptance.

Statistical sampling requires a structured and well-documented approach, involving various KPMG Meijburg & Co specialists. The actual assessment of the record sample is performed either by KPMG Meijburg & Co's tax specialists or by the organization itself.

As the client, you play a key role in providing digital information and in gathering and organizing the supporting documents.

The evaluation not only identifies any deviations and quantifies their magnitude, but also examines their nature and underlying causes. This in turn, enables the implementation of corrective measures. A fundamental premise is that the tax audit performed by the Dutch Tax Authorities builds on the work carried out and that they normally will accept the conclusions of the statistical sampling.

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# Contact Meijburg & Co Tax & Legal

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