

Payslip Fraud Detection — Business User Guide

What Is This?

The Payslip Fraud Detection service analyses a submitted payslip and produces a structured risk assessment. It checks whether the numbers add up, whether the document looks genuine, whether statutory deductions match government-mandated rates, and — if multiple payslips are submitted — whether they are internally consistent with each other.

The result is a report with a clear overall verdict, four detailed check categories, and ten lender-facing signals designed to support credit decisioning.

Overall Status

Every report carries a single **Overall Status** — the most critical finding across all checks.

Status	What It Means
Pass	No concerns detected. The payslip appears genuine and internally consistent.
Warn	One or more anomalies detected. The document may still be legitimate, but manual review is recommended.
Fail	A strong indicator of fraud or a serious data integrity problem. Escalation is recommended before proceeding.
Inconclusive	Insufficient information to make a determination. Key fields may be missing from the payslip.

The Four Check Categories

The report breaks down into four areas of analysis. Each carries its own status using the same Pass / Warn / Fail / Inconclusive scale.

1. Arithmetic Integrity

“Do the numbers add up?”

This category verifies that the payslip’s figures are internally consistent — that gross pay minus deductions equals net pay, that individual deductions sum to the stated total, and that the resulting income falls within a plausible range.

What is checked:

- **Net Pay Balance** — Does **gross pay - total deductions = net pay**? A mismatch is a common sign of document tampering.
- **Cross-Field Consistency** — Do related figures (e.g. individual deductions vs. the stated deduction total) agree with each other?
- **Take-Home Ratio** — Is the proportion of net pay to gross pay realistic? Suspiciously high or low ratios can indicate fabricated figures.
- **Minimum Wage Check** — Is the declared income above the applicable minimum wage for the employee’s region?
- **Deduction Ratio** — Are total deductions a reasonable percentage of gross pay? Extremely high or negative deduction ratios are flagged.

What to watch for:

A **Fail** here almost always means the arithmetic does not balance — the most direct indicator of a tampered or fabricated payslip.

2. Document Credibility

“Does this document look like a real, formal payslip?”

This category evaluates whether the payslip has the hallmarks of a legitimate, formally employed individual — presence of government IDs, recognisable pay patterns, and an overall trust score.

What is checked:

- **Employment Formality Score (0–100)** — Measures how many formal employment markers are present: SSS number, PhilHealth number, Pag-IBIG number, employee ID, employer name, and employer address. A score below 50 indicates a significantly informal or incomplete document.
- **Income Regularity / Pay Frequency** — Based on the pay period dates, is the pay cycle consistent (monthly, biweekly, semi-monthly)? An unrecognisable or erratic pay pattern is flagged.
- **Document Trust Score (0–100)** — A composite score combining the formality score, arithmetic integrity, and statutory coverage. This is the single headline credibility number.

What to watch for:

A low Employment Formality Score combined with a low Document Trust Score is a strong signal that the applicant may not be formally employed, or that the document has been constructed rather than issued by an employer.

3. Cross-Document Checks

“Are multiple payslips from the same job?”

This category is only meaningful when **two or more payslips** are submitted for the same applicant. It checks whether the payslips are consistent with each other.

What is checked:

- **Employer Consistency** — Does the employer name match across all submitted payslips? The check uses fuzzy matching, so minor formatting differences are tolerated. A significant mismatch (e.g. two entirely different companies) is flagged as a Fail.
- **Pay Period Sequence** — Are the pay periods in chronological order, with no overlaps or unexplained gaps? Overlapping pay periods on separate payslips, or large gaps between them, are flagged.

What to watch for:

Employer mismatches across payslips from the “same job” are a strong fraud signal. Pay period overlaps can indicate that the same underlying payslip was used to generate multiple fabricated documents.

If only one payslip is submitted, this category will return **Inconclusive** — it is not a negative signal.

4. Statutory Compliance

“Are the mandatory government deductions correct?”

Philippine law mandates specific contribution rates for SSS, PhilHealth, and Pag-IBIG based on the employee’s income level. This category checks whether the deductions stated on the payslip match what the law requires.

What is checked:

- **SSS (Social Security System)** — The SSS contribution is determined by a salary bracket table. The declared deduction is compared against the expected bracket for the stated gross salary.
- **PhilHealth (NHIC)** — PhilHealth contributions are a fixed percentage of basic salary, subject to a monthly cap. The declared deduction is checked against this rate.
- **Pag-IBIG (HDMF)** — Pag-IBIG contributions follow a tiered rate (1% or 2% depending on salary), capped at ₱100/month. The declared deduction is validated against this.
- **Mandatory Deductions Coverage** — Are all three mandatory deductions (SSS, PhilHealth, Pag-IBIG) present on the payslip at all?

What to watch for:

Missing mandatory deductions, or deduction amounts that do not match any valid bracket or rate, suggest the payslip was not generated by a legitimate payroll system. This is one of the most reliable indicators of fraud because fabricated documents rarely apply the correct statutory rates.

Lender Signals

The ten lender signals are quick-reference summaries designed for credit decisioning. Each signal has a **status** (Pass / Warn / Fail / Inconclusive) and a **value** that gives the specific finding.

Signal	What It Tells You
Payslip Arithmetic Integrity Score	An overall arithmetic health score out of 100. Scores below 80 indicate meaningful inconsistencies.
Document Trust Score	A composite credibility score out of 100. Scores below 60 warrant manual review.
Employment Formality Score	How formally employed the applicant appears, out of 100. Scores below 50 indicate a low-formality or informal employment arrangement.
SSS Contribution Consistency Score	Whether the SSS deduction matches the statutory bracket, scored out of 100.
Mandatory Deductions Coverage Ratio	How many of the three mandatory deductions (SSS, PhilHealth, Pag-IBIG) are present — shown as X / 3. A 1 / 3 or 0 / 3 result is a strong red flag.
Net Income Stability Proxy	The take-home percentage of gross pay. Normal range is roughly 75%–92%. Values outside this range should prompt further scrutiny.
Cross-Field Consistency	How many internal numeric cross-checks passed. A result like 3/5 checks passed means two fields disagree with each other.
Minimum Wage Check	Whether the declared income (annualised and estimated) is above the applicable minimum wage for the region. A fail here means the stated salary is legally implausible.
Deduction Ratio Check	Total deductions as a percentage of gross pay. Normally 8%–25% for a formally employed individual in the Philippines.
Income Regularity / Pay Frequency	The detected pay cycle (Monthly, Biweekly, Semi-monthly). “Unknown” or “Inconclusive” means the dates could not be resolved.

Financial Summary

Every report also extracts the key financial figures from the payslip into a clean summary:

Field	Description
Gross Pay	Total earnings before deductions
Net Pay	Take-home pay after all deductions
Basic Pay	Base salary, if stated separately from gross
Total Deductions	Sum of all deductions
SSS Contribution	Amount deducted for SSS
PhilHealth Contribution	Amount deducted for PhilHealth
Pag-IBIG Contribution	Amount deducted for Pag-IBIG
Withholding Tax	Income tax withheld
Take-home Ratio	Net pay as a percentage of gross pay

All amounts are in the currency of the payslip (typically Philippine Peso, PHP).

The Excel Report

Every fraud detection run produces a downloadable Excel report with three sheets:

Sheet	Contents
Summary	Run information, financial summary, category statuses, and all 10 lender signals in one view
Payslip Data	All fields extracted from the submitted payslip, presented as a simple field-value table
Check Details	A full breakdown of every finding, with the category, check name, severity, and explanation

How to Interpret a Report: Quick Decision Guide

Scenario	Recommended Action
Overall Pass , all signals green	Low risk — proceed with standard process

Scenario	Recommended Action
Overall Warn , 1-2 signals flagged	Moderate risk — review the flagged signals; consider requesting additional documents
Overall Warn , arithmetic or statutory signals flagged	Elevated risk — request a second payslip from a different pay period for cross-document validation
Overall Fail on Arithmetic Integrity	High risk — the numbers do not balance; likely tampered document
Overall Fail on Employer Consistency (multi-payslip)	High risk — payslips may be from different employers or fabricated
Mandatory Deductions Coverage 0 / 3 or 1 / 3	High risk — genuine payroll systems always include mandatory deductions
Document Trust Score below 50	High risk — consider escalating for manual review regardless of other signals
Most signals Inconclusive	Payslip is missing key fields — request a more complete document before decisioning

Submitting Multiple Payslips

For stronger fraud detection, we recommend submitting **two to three consecutive payslips** from the same applicant in a single request. This enables cross-document checks (employer consistency and pay period sequencing) that are not possible with a single document.

When multiple payslips are submitted: - Arithmetic, credibility, and statutory checks are based on the **most recent (first) payslip** - Cross-document checks compare **all submitted payslips** against each other

Notes on Inconclusive Results

An **Inconclusive** result does not mean fraud. It means the system could not find enough information to make a determination. Common reasons include:

- Key fields (SSS number, PhilHealth number, pay period dates) are missing from the payslip
- Only one payslip was submitted (cross-document checks cannot run)
- Statutory rate tables are not available for the payslip's year or region

In these cases, requesting a more complete or more recent payslip is recommended before making a credit decision.