**Logistic Regression Coefficients (Sorted by Influence)**

| **Feature** | **Coefficient** | **Interpretation** |
| --- | --- | --- |
| **Credit\_History** | **+1.389** | Strongest positive factor. Applicants with a positive credit history are **much more likely** to get loan approval. |
| **Property\_Area\_Semiurban** | +0.592 | Applicants living in **semiurban areas** have a higher chance of approval compared to the base category. |
| **Dependents\_3+** | +0.370 | Having 3 or more dependents **increases approval chances**—may reflect financial responsibility. |
| **Married\_Yes** | +0.310 | Married applicants are **more likely** to be approved than single applicants. |
| **Dependents\_2** | +0.294 | Applicants with 2 dependents also get **better approval chances**. |
| **Education\_Graduate** | +0.147 | Graduates have a **slightly better** chance of approval. |
| **Gender\_Female** | +0.070 | Female applicants get **slightly better likelihood** than males. |
| **Loan\_Amount\_Term** | +0.058 | Longer loan term **slightly improves approval**, as EMI becomes affordable. |
| **Self\_Employed\_Yes** | +0.031 | Being self-employed has a **small positive impact**. |
| ApplicantIncome | −0.002 | Income alone does **not significantly affect** approval. Probably because other factors like EMI ratio matter more. |
| **Self\_Employed\_No** | −0.030 | Negligible negative impact; roughly same as self-employed. |
| CoapplicantIncome | −0.054 | Higher co-applicant income **slightly reduces approval chances**, possibly due to informal or unstable income patterns. |
| Gender\_Male | −0.069 | Male applicants have **slightly lower chance** compared to females. |
| LoanAmount | −0.100 | Larger loan amounts **decrease approval chances** because of higher risk. |
| Dependents\_0 | −0.105 | Applicants with **no dependents have slightly lower approval probability**—banks may trust people with family responsibility more. |
| Property\_Area\_Urban | −0.119 | Urban applicants are **slightly less likely** to be approved than semiurban. |
| Education\_Not Graduate | −0.146 | Non-graduates face **lower approval chances**. |
| Married\_No | −0.309 | Unmarried applicants are **less likely** to get approved compared to married ones. |
| Property\_Area\_Rural | −0.472 | Applicants from **rural areas face lower approval probability**. |
| Dependents\_1 | −0.559 | Applicants with **1 dependent surprisingly have lower approval chance**. Possibly noise or imbalance in dataset. |