$$\left| \frac{a_{12}}{a_{21}} \right|, \quad \left| \frac{a_{21} \, a_{12}}{a_{11} \, a_{22}} \right| = \| B_{GS} \|_\infty < 1.$$

$$|a_{21}||a_{12}| < |a_{11}||a_{22}|$$

$$\frac{|a_{12}||a_{21}|}{|a_{12}|} < \frac{|a_{11}||a_{22}||a_{11}|}{|a_{21}|}$$

$$\frac{|a_{21}|}{|a_{12}|} < \frac{1}{|a_{21}|} \cdot |a_{11}| \cdot |a_{22}|$$

a_{21}	a_{12}	a_{11}	a_{22}
0.09	9	0.1	10

$$\cdots \frac{|a_{12}|}{|a_{21}|} < \frac{|a_{11}|}{|a_{21}|}$$

$$\cdots \frac{|a_{21}||a_{12}|}{|a_{11}||a_{22}|} < \frac{|a_{11}||a_{22}|}{|a_{11}||a_{22}|}$$

$$\frac{9}{0.09} = 100$$

NEED $a_{12} < a_{21}$

$$\left. \begin{array}{c} \frac{9}{0.09} < \frac{0.1}{10} \\ 100 < 0.01 \end{array} \right\}$$

SO $0.09, 9$ IS AN INVALID CASE IF A IS STRICTLY DIAGONAL

$$< 1$$

& SINCE

$$|a_{12}| < |a_{11}|.$$

$$\sum_{\substack{j=1 \\ j \neq i}}^{2} |a_{ij}| = |a_{12}| + |a_{21}| < |a_{ii}|$$

$$\left. \begin{array}{c} |a_{21}| < |a_{11}| \\ |a_{12}| < |a_{22}| \end{array} \right\} \cdots$$