0,5

$$\int_{-1}^{1} x^2\, \nu(dx) = \underbrace{\int_{-1}^{0} x^2 \left(\lambda p \theta e^{\theta_1 x}\right) dx}_{<\infty} + \underbrace{\int_{0}^{1} x^2 \lambda (1-p)\theta e}_{<\infty}$$

$$\int_{-\infty}^{-1} \nu(dx) = \int_{-\infty}^{-1} \lambda p \theta_1 e^{\theta_1 x_1}\, dx = \lambda p \theta \left[\frac{e^{\theta_1 x}}{\theta_1}\right]_{-\infty}^{-1} =$$

$$= \lambda p \frac{e^{-\theta_1}}{\cancel{\theta_1}} < \infty$$

0,5

$$\int_{1}^{+\infty} \lambda(1-p)\theta_2 e^{-\theta_2 x}\, dx = \lambda(1-p)\left[\frac{e^{-\theta_2 x}}{-\theta_2}\right]_{1}^{+\infty} =$$

$$= \lambda(1-p)\frac{1}{\cancel{\theta_2}} e^{-\theta_2} < \infty$$

Logo, satisfaz as condições de medida de Lévy.