We present a novel approach to depicting asset pricing dynamics by characterizing shock exposures and prices for alternative investment horizons. We quantify the shock exposure in terms of an elasticity that measures the impact of a current shock on future cash-flow growth. This elasticity depends on the current state and on the date of the asset payoff. Similarly, we quantify the price of the exposure to the shock in terms of elasticity. The calculations are designed to accommodate nonlinearities in the stochastic evolution, modeled as a Markov process, and are applicable to models with Brownian as well as jump components to uncertainty. Stochastic growth in the underlying macro-economy and stochastic discounting in the representation of asset values are central ingredients in our investigation. Our analysis is facilitated by a change in measure that extracts the permanent stochastic component to growth or discounting. We characterize elasticities for a production economy with regime switches in the growth rate for the technology.