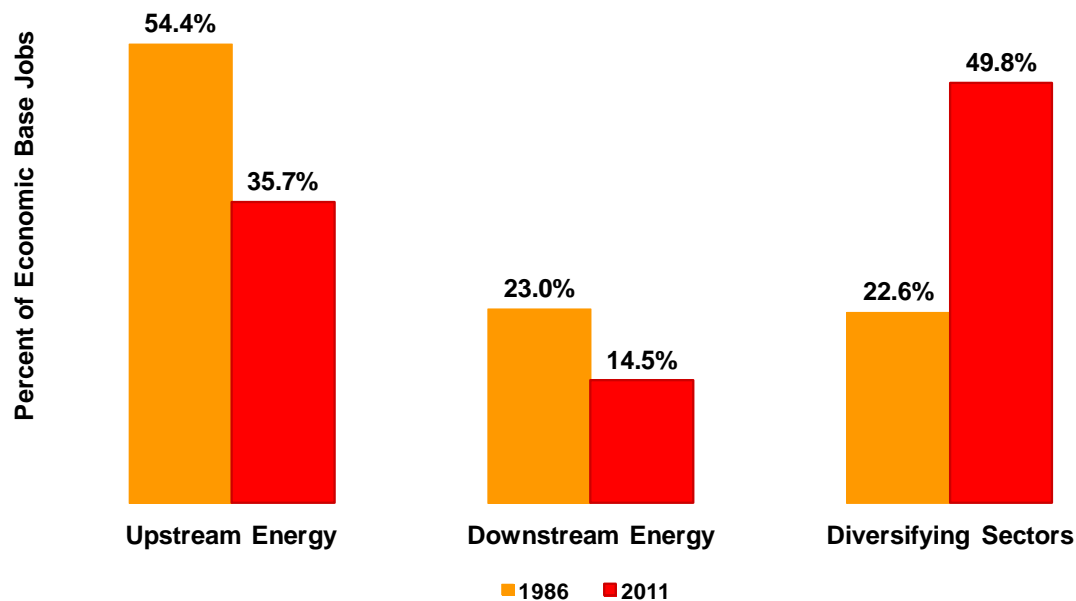


Economic Base Diversification

Houston's economic base has diversified, sharply decreasing its dependence on upstream energy.

Houston MSA Economic Base Employment

1986 and 2011



Source: Institute for Regional Forecasting, University of Houston, Dec 2012

- The economic base is the portion of a region's economy that produces goods or services for export outside the region. Houston's base, which increased 3.9 percent during the 12 months ending December '11, comprises: *upstream energy* (oil and gas exploration and production, oilfield equipment manufacturing and wholesaling, and pipeline transportation), up 7.4 percent; *downstream energy* (refining and chemicals manufacturing), down 0.4 percent; and *diversifying, or energy-insensitive, sectors*, up 2.7 percent. Since '86, the energy-insensitive portion of Houston's economic base has grown at a compound annual rate of 5.9 percent.
- Upstream sectors suffer when oil and gas prices fall; refining and chemicals benefit because the cost of feedstocks is reduced; energy-insensitive sectors are affected only to the extent that energy costs impinge on operating costs. Today, upstream sectors represent just over a third of Houston's economic base jobs, versus more than two-thirds before the '80s recession and still more than half at the bottom of that recession in '87. Energy-insensitive sectors, which were less than a quarter of base employment in '86, reached the 50 percent mark in late '99 and has remained around one-half of the economic base since then.
- Substantial structural alteration in Houston's economy over the past 25 years has reduced Houston's vulnerability to downturns in upstream energy, which nonetheless continues to influence Houston far more than it does the nation as a whole.