We study the determinants of vertical integration. We first derive a number of predictions regarding the relationship between technology intensity and vertical integration from a simple incomplete contracts model. Then, we investigate these predictions using plant-level data for the UK manufacturing sector. Most importantly, and consistent with the theoretical predictions, we find that the technology intensity of downstream (producer) industries are positively correlated with the likelihood of integration whereas the intensity of upstream (supplier) industries are negatively correlated with it. Also consistent with theory, both correlations are stronger when the supplying industry accounts for a large fraction of the producer’s costs. These results are generally robust and hold with alternative measures of technology intensity, with alternative estimation strategies, and with or without controlling for a number of firm and industry-level characteristics. (JEL: L22, L23, L24, L60)