There is a typo in Problem 2.9(e). The second appearance of f_L should read f_T . The correct equation is $w=p^xf_L=p^yg_L; r=p^xf_T=p^yg_T; p^x/p^y=u_x/u_y$.

$$w = p^x f_L = p^y g_L; r = p^x f_T = p^y g_T; p^x/p^y = u_x/u_y.$$