An inherent instability in the matrix solution to DGLAP suggested by P. G. Ratcliffe (HEP_PH/0012376)

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Using data points g_1 or $F_2^{p,n,d}$ (x_i, Q_{ij}^2 as the only parameters, thus doing away with the need for a set of free parameters used in a phenomenological fit to (polarized) parton distributions usually adopted (GRV, MRS, CTEQ, ...), we arrive at a system of linear equations. Taking the unpolarized case, where there is plenty of data, and a possible combination of unknowns q_8, σ, and g, where $q_3(x_i, Q_{i1}^2)=3F\_2^{(p-n)}(x_i, Q_{i1}^2)$ is rendered known, there remains 3 linear equations with 3 unknowns at every x_{i}, each decomposing one of the data points $F_2^p(x_i, Q_{ij}^2)$, j=1,2,3. The unknowns would be at (x_i, Q_{i1}^2), as the matrix solution of the NS and S DGLAP evolution equations can be used to determine the unknowns q_3, q_8, σ, and g at (x_i, Q_{ij}^2), j=2,3 in terms of those at (x_i, Q_{i1}^2). Other possible set of unknowns and procedures give us an equivalent system of decomposition equations. The determinant of coefficients of these equations is too small, due to the nature of evolution, to permit a stable solution within the range of the errors of F_{2}^p values. The significance of the problem and likely solutions for it are discussed