Tier structure of industry production function

	Symbol	Name	Components
1	Q	Gross output	capital, labor, energy, materials Q=f(K,L,E,M)
2	E	Energy	coal mining, petroleum & gas mining, petroleum refining, electric utilties, gas utilities E=f(X3,X4,X16,X30,X31)
3	M	Materials (nonenergy)	Construction, Agriculture Mat, Metallic Mat, Nonmetallic Mat, Services Mat M=f(X6,MA,MM,MN,MS)
4	MA	Agriculture materials	Agriculture, Food manuf, Tobacco, Textile-apparel, Wood-paper MA=f(X1,X7,X8,TA,WP)
5	MM	Metallic Materials	Fab-other metals, Machinery mat, Equipment MM=f(FM,MC,EQ)
6	MN	Nonmetallic Materials	Nonmetal mining, Chemicals, Rubber, Stone, Misc manuf MN=f(X5,X15,X17,X19,X27)
7	MS	Services Materials	Transportation, Trade, FIRE, Services, OS MS=f(X28,X32,X33,X34,OS)
8	TA	Textile-apparel	Textiles, Apparel, Leather TA=f(X9,X10,X18)
9	WP	Wood-paper	Lumber-wood, Furniture, Paper, Printing WP=f(X11,X12,X13,X14)
10	OS	Other services	Communications, Govt. enterprises, NC imports OS=f(X29,X35,X_N)
11	FM	Fab-other Metals	Metal mining, Primary metals, Fabricated metals FM=f(X2,X20,X21)
12	MC	Machinery materials	Ind. Machinery, Electric Machinery MC=f(X22,X23)
13	EQ	Equipment	Motor vehicles, Other transp equip, Instruments EQ=f(X24,X25,X26)