argue that a country can raise its national income by shifting its industrial mix toward industries that have high value added per worker.[17]

The problem with this argument is that it fails to ask why some sectors have higher value added per worker than others. Commentators often presume that high value added sectors must pay higher wage rates or earn higher rates of profit than low value added sectors. High value added sectors are often capital-intensive, like petrochemicals. In such industries, the high value added per worker is compensated for by extremely high capital costs, so that neither wages nor profit rates are particularly out of line. In other cases, high value added reflects human capital: high levels of training or skill. For example, aircraft production has higher labour productivity than the making of footwear. The higher value added in the aircraft industry results because it uses more capital and/or higher skills and technology than the footwear industry.

Suppose for a moment that high value added sectors are those that have large inputs of capital per worker. Could we then argue that a country can raise its national income by expanding these sectors? We know that if a country accumulates capital, it will indeed grow richer and shift its industrial mix toward capital intensive sectors and away from labour intensive sectors. This shift does not, however, need a special government policy, because it will happen as a natural consequence of market forces reacting to capital availability.

What would happen if a country did subsidize its capital intensive industries? Other things being equal, a given amount of capital will employ fewer workers in capital intensive than in labour intensive sectors. So a shift of capital toward the capital intensive part of the economy will initially tend to reduce employment. Although unemployment may eventually be eliminated by a fall in real wages that encourages all sectors to substitute labour for capital, the initial increase in unemployment is hardly the result that one looks for from an industrial policy.

Will such an industrial policy raise national welfare? Not unless it helps correct some market failure. If there is no market failure, the initial allocation of resources will already be optimal, and the government-sponsored reallocation cannot improve it. One study finds that, during the 1980-84 period, the wage of a typical worker in an export intensive industry exceeded that in an import competing industry by roughly 8%. However, one recent study finds that the evidence in high wage industries, such as the U.S. auto and steel sectors, does not support the

[17] For one such view, see Lawrence F. Katz and Lawrence H. Summers, "Industry Rents: Evidence and Implications", *Brookings Papers on Economic Activity, Microeconomics*, 1989: 209-75. Mr. Summers heads the Department of the Treasury in President Clinton's Administration.