

## **I Pencil: A Product of the Mixed Economy**

by JOHN QUIGGIN on APRIL 16, 2011

This essay is a description of the incredibly complex “family tree” of a simple pencil, making the point that the production of a pencil draws on the work of millions of people, not one of whom could actually make a pencil from scratch, and most of whom don’t know or care that their work contributes to the production of pencils.

“ . . . the absence of a master mind, of anyone dictating or forcibly directing these countless actions which bring me into being. No trace of such a person can be found. Instead, we find the Invisible Hand at work.

. . . My family tree begins with what in fact is a tree, a cedar of straight grain that grows in Northern California and Oregon. That would probably be in a forest managed by the US Forest Service or the Bureau of Land Management, or maybe a similar state agency.”

And why is this? Starting in the late 19th century, the US government (most notably under Theodore Roosevelt) judged that the nation’s forests were not likely to be adequately managed to ensure a supply of timber for, among other things, the production of pencils for future generations if they relied on existing private property rights and the workings of the invisible hand. Similar judgments have been made in Australia and many other countries. That is, the production of pencils in the US in the 1950s depended, to a substantial extent, on conscious planning undertaken 50 years ago.

It would be naive to suppose that public management of national forests is driven by a concern for some abstract notion of the common good. A variety of interests (logging companies, land developers, environmentalists and others) push with greater or lesser success for their view of how forests ought to be run, and sometimes succeed in capturing government agencies that are supposed to regulate them. But whatever the faults of public ownership and management, it has survived in the forest sector for well over a century, and has delivered outcomes that appear generally acceptable.

The pencil goes on to mention “all the persons and the numberless skills” that are involved in forestry and in the various subsequent stages of production. Most of those people would have acquired their basic skills in public schools, and learned more in colleges, trade schools and so on, mostly public or publicly funded.

Education is a prime example of a service that (except in marginal cases, or for very specific vocational skills) has almost nowhere been successfully provided on a market-driven for-profit basis. Successful ‘private’ schools are almost invariably non-profit, and commonly benefit from direct or indirect public funding. The near-total failure of for-profit school companies like Edison, and the reliance of the for-profit higher education sector (Kaplan, Phoenix etc.) on fraudulent exploitation of Federal Grants are cases in point. In Sweden, long the poster child for for-profit schooling, similar reports are showing up

As with forests, the availability of skilled and educated workers to produce Read’s pencil depends on planning decisions made years or decades previously.

Again, it’s a mistake to think of this as the product of an all-wise and beneficent “central planner”. Schools, like everything else in society, are a site of contest and struggle, in part over attempts to produce a compliant workforce for an industrial society, as against broader visions of what education might mean. And, in the current context, it’s worth pointing out that proposals and attempts at what used to be called “manpower planning”, that is, trying to predict future labor demand patterns and ensure that the education system supplies the right kinds of skills, have been consistent failures. But still, the price

system is playing only a marginal and indirect role in the provision of education.

Next up is the rail trip to San Leandro California. Read's pencil doesn't mention the line, but it's presumably on the network of the Union Pacific Railroad, created by Act of Congress under Abraham Lincoln, with the plan of building a railway line across the US. Reliance on the invisible hand to produce coherent railway networks was a failure wherever it was tried, and the same is proving true today wherever governments seek to turn the road network over to private toll road operators. In complex transport networks, a fair degree of central planning is in fact necessary.

And, while we learn how the pencil is produced by sandwiching a graphite tube between two wooden slates, the pencil forgets to mention its invention and patenting by Nicolas Conte in the late 18th century. The patent system is a temporary government-created monopoly, and a classic example of the mixed economy.

Finally, let's look at Eberhard Faber, the company that made the pencil. It's now a subsidiary of Newell Rubbermaid, a multinational consumer goods conglomerate with over 20 000 employees and dozens of different brands. Obviously, someone sees a fair bit of benefit in "dictating and forcibly directing" the work of these thousands of employees, rather than relying exclusively on transactions in the marketplace. And the shareholders seem keen on organizing all this activity under the state-created protection of the limited-liability corporation, rather than acting as independent entrepreneurs.

A corporate firm (or even an unincorporated business firm) is a complex social construction, embodying both co-operation, to produce and sell the firm, and conflict, between workers and owners over wages and conditions, between shareholders and managers over corporate control, and between long-term and short-term stakeholders over strategic directions. Out of this mix of co-operation and conflict, the firm produces a distribution of the income it generates: always unequal, but more equal at some times and places than others.

What can we learn from all this? As Read argues, following Adam Smith, markets can indeed organize very complex production processes, to an extent that might well seem miraculous to anyone who tried to reason about it in the abstract. But that doesn't mean that markets are the only, or invariably the best, way to organize production. The majority of economic activity takes place without any direct connection to markets, undertaken in the household or government sector, or within large corporations that trade in the market sector, but use central planning to organize their own activities. The boundaries are constantly shifting as some activities shift between household, government and market sectors, and as households, governments and firms outsource some activities and integrate others.

The fact that a particular form of organization exists and functions does not prove that it is optimal. It is certainly possible to imagine forms of modern society in which markets and private property play no role, or forms in which there are "markets in everything". And, within the broad class of mixed economies, there's a wide range of possibilities – most goods and services have somewhere and sometime been provided by governments, and somewhere and sometime by private markets.

Nevertheless, the broad outlines of the mixed economy have remained broadly stable since the 1940s, surviving both the challenge from comprehensive central planning in the Soviet Union and the push for privatization that began in the 1980s and ended (as a program with a credible theoretical foundation, if not as an ideological agenda) in the Global Financial Crisis. Any serious policy program has to take account of this fact.