The Seattle Times

Taxpayers for U.S. chips | Commentary

By Shira Ovide

August 15, 2022

The U.S. has authorized \$280 billion in taxpayer money to subsidize rich computer chip companies and invest in technology research for the sake of keeping America strong and innovative.

President Joe Biden on Tuesday signed the law, officially known as the CHIPS and Science Act of 2022, calling it "an investment in America itself."

If this law does what its many backers in government and private industry hope, the U.S. will have more control over the future of essential computer chips and have a hedge if China grows more hostile toward Taiwan, a U.S. ally. The law also aims to keep America on the cutting edge of technology by putting more government support into research.

Here is why the law exists and what it could, and could not, do to help America:

The dream of U.S.-made chips

The law authorizes more than \$52 billion to help companies pay for building or expanding U.S. computer chip factories and for research and worker training. In short, American taxpayers are paying computer chip companies to make their products here and not in, say, Germany or South Korea.

Why? U.S. officials are worried that a relatively small percentage of the world's computer chips are manufactured in the U.S., and that it includes virtually none of the most sophisticated chips used in military equipment and smartphones.

The first concern is not necessarily valid. Lots of computer chips are basic, like those used for the computer memory or brains in appliances, and the U.S. probably does not need to make more of those. Manufacturing of many consumer goods like T-shirts and TV sets is outsourced to other countries.

But for two big reasons, backers of the law say that the U.S. should use government money to make it financially worthwhile for U.S. and foreign corporations to make more computer chips stateside.

First, advocates say it is important for America to preserve expertise in designing and building advanced computer chips. We do not have the same national interest in maintaining T-shirt knowhow. Building computer chip factories costs a ton, and it is more expensive in the U.S. in comparison to other countries, partly because of subsidies provided by other governments. This new law will enable the U.S. to help level the playing field.

The second reason is the potential vulnerability of Taiwan, home to Taiwan Semiconductor Manufacturing Co., which makes build-to-order chips for many companies, including Apple. If you have a smartphone or shop online, chips made by the Taiwanese company are probably involved. If China continues to escalate its military confrontations with Taiwan, the supply of most of the world's advanced computer chips could be at risk.

Supporting a little more chip production in the U.S. most likely will not make much of a dent on Taiwan Semiconductor Manufacturing Co.'s hold on the more advanced chips. America's small market share of advanced computer chip manufacturing is partly the result of the struggles of the country's leading chipmaker, Intel. A government bill will not change that.

But more executives and government officials believe the benefits of encouraging more chip production in America are worth the risk of wasting money with taxpayer handouts to chip companies.

Most of the law is about basic research — for better or for worse

There is about \$200 billion for programs aimed at American invention.

Cash is flowing to create 20 regional technology centers for developments backed by the government in areas such as chips, energy technologies and biotechnology. Taxpayer money is sprinkled to other government agencies to train Americans for next-generation jobs and for scientific and technical research that does not have an immediate payoff.

The Wall Street Journal editorial board recently described this part of the law as a wasteful expansion of the federal bureaucracy and a likely fruitless partnership of government and large industries.

That could be true, although there is a long history of the government being essential to American innovation. We might not have computer chips, the internet or COVID-19 vaccines without collaborations between big government and big business. Of course, more government spending does not necessarily translate into more innovation, as China is finding with its own government-backed computer chip initiative.

What this law will not do

Despite what some corporate executives and public officials have said, putting government money into computer chips most likely will not solve shortages of products like cars.

Auto manufacturers have struggled to make as many vehicles as Americans want to buy. That is in part because they cannot buy enough chips for features like navigation and braking systems, but building more chips in America will not fix that. This problem was caused by a surge in consumer spending on physical products, factory shutdowns related to the coronavirus and manufacturers' failures to adapt to the new realities.

Scott Lincicome, an economist at the Cato Institute, a libertarian think tank, used infant formula as an example. U.S. factories make nearly all of the baby formula consumed in this country. That did not prevent — and might have contributed to — the bare store shelves of formula in the U.S. this year.

Some computer chip companies and lawmakers have also recently stressed that expanding chip manufacturing in the U.S. will create more high-paying jobs. Economists have long cautioned about the effectiveness of the public helping to pay for jobs in some industries.

The chips law is ambitious and may not show its merits for many years. But at a time when the federal government is stuck on many national priorities, elected officials actually did something in chips that may prove momentous.