

# the Connection

A Quarterly Review

4<sup>th</sup> Quarter 2020

## SILICON LEADS THE WAY

The United States must turn the page on the worst economic year this century. To accomplish this, we must invest in industries and education that will support employment for the next 25 years. One industry that is capable of high employment and economic stability is semiconductor manufacturing. Semiconductors are the backbone of the modern economy. Creating more capacity now will allow us the maneuverability to chart a course in future production across multiple sectors reliant on the ubiquity of silica.

Semiconductors are an area where the U.S. has historically dominated, but we have fallen behind. In 1990, 40% of all semiconductors were manufactured here. As of 2019, that number is 11%. There are multiple reasons for that, but the primary reason is that production has been cheaper overseas. We still dominate design and intellectual property, but how long can that continue if we do not own manufacturing? Silicon Valley became what it is today because it made Silicon wafers. Having the hardware access created the software giants in Silicon Valley today. We need a mix of public and private investment for costs of domestic production to come back down.

The federal government has been increasingly willing to intervene in domestic economics. Between direct investment (subsidies and grants), passive investment (tariffs, purchasing mandates and tax breaks) and cooperative investment with private enterprise there is a massive potential for semiconductor investment in North America. We need control over our production for national security reasons. We also need control over hardware so that we have a more secure data infrastructure. We cannot trust foreign governments to not take advantage of the means of production. Especially when the means of production is vital to our own innovative interests.

Silicon Valley should become a model for other regions. Areas like Austin TX, St. Paul MN, and Boise ID are already investing in new economy manufacturing and

succeeding at lowering costs. We should be building out our semiconductor industry supply chains as a direct copy of our automotive industry. Plants in multiple locales with the ability to manufacture and assemble modularly (change input and output on short notice) are key. North America has the capability to be the most robust semiconductor manufacturing location globally. We have the pocketbook, the universities and the labor to meet expanding future demand.

When we build out these multiple manufacturing sites, there will be a daisy chain of positive economic and political benefits. Semiconductor manufacturing jobs pay double on average what a standard industrial wage pays. These jobs do not require college degrees. They create opportunities for service and innovative business around them. They have the profitability to support higher wages to keep pace with inflation, unlike the automotive industry. This is the industry that can help recreate the middle class the U.S. so desperately needs.

The October 2020 Congressional Research Service paper – [Semiconductors: U.S. Industry, Global Competition, and Federal Policy](#) – outlines much of what the government should be focused on. The United States itself can make investments, borrowing at historically low rates to fuel an industry that is expected to grow at triple nominal GDP. If the U.S. can capture that growth, it will change our expected GDP. That should be the focus of the desperately needed infrastructure package. Subsidizing that growth may require government funds. So long as the U.S. does not take control over the means of production, we should encourage that public investment.

From an investment perspective, semiconductors still represent a pocket of value investment in a market that has favored growth for a long time. Thankfully, we do not need to make many changes in portfolios to take advantage. We are already invested for this future. We have been overweight in semis since day one, August 1<sup>st</sup>, 2014, and we plan to continue making investments in silicon for the foreseeable future.

## THE ACT OF GIVING

Below is an updated list of some organizations our clients are helping today.

All Local Food Banks

[www.sfmfoodbank.org](http://www.sfmfoodbank.org)

[www.shfb.org](http://www.shfb.org)

[www.foodbankccs.org](http://www.foodbankccs.org)

[www.refb.org](http://www.refb.org)

Bloom Marin

[www.bloom.org](http://www.bloom.org)

Maya's Music Therapy

[www.mayasmusic.org](http://www.mayasmusic.org)

Friends of the Urban Forest

[www.fuf.net](http://www.fuf.net)

Guide Dogs for the Blind

[www.guidedogs.com](http://www.guidedogs.com)

Doctors without Borders

[www.doctorswithoutborders.org](http://www.doctorswithoutborders.org)

The Nature Conservancy

[www.nature.org](http://www.nature.org)

National Kidney Foundation

[www.kidney.org](http://www.kidney.org)

Guide Dogs of America

[www.guidedogsofamerica.com](http://www.guidedogsofamerica.com)

Golden Gate National Parks Conservancy

[www.parkconservancy.org](http://www.parkconservancy.org)

Fine Arts Museums of San Francisco

[www.famsf.org](http://www.famsf.org)

Canine Companions for Independence

[www.cci.org](http://www.cci.org)

Alzheimer's Association

[www.alz.org](http://www.alz.org)

The Foundation for Rotary International

[www.therotaryfoundation.org](http://www.therotaryfoundation.org)

Wildcare

[www.wildcarebayarea.org](http://www.wildcarebayarea.org)

Homeward Bound of Marin

[www.hbofm.org](http://www.hbofm.org)

Whistlestop

[www.whistlestop.org](http://www.whistlestop.org)

FINCA

[www.finca.org](http://www.finca.org)

Sonoma Land Trust

[www.sonomalandtrust.org](http://www.sonomalandtrust.org)

Friends of the Earth

[www.foe.org](http://www.foe.org)

The American Friends Service Committee

[www.afsc.org](http://www.afsc.org)

Amnesty International

[www.amnestyusa.org](http://www.amnestyusa.org)

Eastside College Prep

[www.eastside.org](http://www.eastside.org)

Northern Sierra Partnership

[www.nothernsierrapartnership.org](http://www.nothernsierrapartnership.org)

American Bird Conservancy

[www.abcbirds.org](http://www.abcbirds.org)

The Cornell Lab of Ornithology

[www.birds.cornell.edu](http://www.birds.cornell.edu)

Mono Lake Committee

[www.monolake.org](http://www.monolake.org)

California Trout

[www.caltrout.org](http://www.caltrout.org)

Tahoe Rim Trail

[www.tahoerimtrail.org](http://www.tahoerimtrail.org)

Ocean Conservancy

[www.oceanconservancy.org](http://www.oceanconservancy.org)

Global Fund for Women

[www.globalfundforwomen.org](http://www.globalfundforwomen.org)

Marin Agricultural Land Trust

[www.malt.org](http://www.malt.org)

Walk to End Alzheimer's – San Francisco, CA

[www.act.alz.org/sanfrancisco2019](http://www.act.alz.org/sanfrancisco2019)



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