

Investments

Ideas

- Use Manufacturing Forum data
- Pose as an investment issue.
- Failure of tech to invest back in the society that made them rich
 - ...absence of stewardship
- Failure of our generation to invest for the next
 - ...we are breaking that continuous chain of investment from one generation to the next which has characterized our society
- Some examples
 - ...poverty of young (use demographics)
 - ...quality of education
 - ...macroeconomic policies
 - entitlements
 - ...bankruptcy of professions
 - ...business practices
 - ...S&L fiasco
 - ...guyout mania
- What is going on
 - ...an aging America?
 - ...media influence?
 - ...absence of leadership?

The Dangers of Underinvestment

- Perhaps the most ominous dark cloud on the horizon of all is the increasing evidence that we as a people we have not yet recognized either the nature or the magnitude of the investments we must make to achieve prosperity in an age of knowledge.
- While we all give the "age of knowledge" lip service, the evidence suggests that in reality, we long for a return to the agricultural and manufacturing economies that once made us reach...
1. Over the past several years, numerous studies have suggested that Michigan is seriously underinvesting in its "knowledge infrastructure"...by as much as 30% to 40% relative to other states.
Interestingly enough, studies performed by both the Democratic administration and the Republican Senate agree with this prognosis...and yet nothing has happened...and we slip even further behind!
 2. Particular concern has been focused on the "education pipeline" in Michigan...from pre-school through K-12 education through higher education to lifelong education.
Two-thirds of new jobs are in professional, managerial, and sales area...just 5% go to unskilled workers...as Michigan economy shifts from manufacturing to knowledge-based and service jobs.
 3. The challenges faced by K-12 education were well-summarized in a recent editorial in a Detroit paper:
"If Michigan is to prepare tomorrow's workers for tomorrow's jobs, major structural changes are needed in public education, both in classroom quality and in the adequacy and fairness with which the system is financed."
"What is required is a strengthened commitment in Lansing to school finance reform and improving the quality of basic and higher education, and a greater political willingness to stand up to special interests who would thwart those long-term goals to pursue short-term objectives. The opportunity to eliminate chronic unemployment in Michigan may be never more within our grasp than between now and the end of the century. The alternative is a growing mismatch of job opportunities and job training that threatens

not only the state's recent prosperity, but its very solvency."
(Free Press editorial, 1/5/89)

Yet, we continue to be paralyzed in our efforts to come to grips with school finance reform or major structural changes necessary to achieve quality in public education.

Lottery

Instead, we continue to rely on gimmicks...such as the State Lottery, which in effect robs from those most in need of state assistance...

Furthermore, since these Lottery funds flow into the General Fund, and since state support of education has clearly not tracked the increase in lottery revenues, it is clear that lottery revenues are, in effect, going to build and operate more prisons (the only part of the state budget which has growth at this pace).

Some irony here, since the Lottery, in effect, is transferring funds from the deprived components of our population..

4. The situation is somewhat different yet no less acute for higher education in our state.

While the quality of Michigan higher education today is very high, the long term prognosis remains guarded...

The Investment in Higher Education

Our state has dropped from 6th in the nation in its support of higher education to 35th over the past two decades... into the bottom third!!!

Indeed, we have dropped to 32nd in tax revenue for higher ed--7.8% compared to 11.4% for California!

We are being outspent by 30 - 40% in state support per student... Not simply by prosperous states like California...but by neighbors such as Indiana and Ohio!

Over the past 10 years, high tech states such as California, New Jersey, Massachusetts, and New York have seen real dollar increases in higher education appropriations of roughly 20 to 30%. In sharp contrast, over this period Michigan has declined by 4.5%...

Certainly these states are prosperous...but they are also investing substantially more of their resources in higher education...in preparation for a knowledge-based future...than are we.

Indeed, one measure of the importance of higher education in the state budget is the ratio of tax dollars per enrollment ratio... a measure by which Michigan ranks 47th in the nation!

It seems clear that higher education faces a serious challenge in Michigan. Our present level of public support is clearly inadequate to maintain a system that is competitive on a national basis.

We are attempting to compete in this knowledge-intensive future with an underfunded public system of higher education... and no private capacity (such as a Stanford, MIT, or Caltech).

Only the autonomy granted to our public universities have allowed them to "overachieve" their public support through higher tuition and other sources of financial support.

This has given public higher education in Michigan some capacity to face the devastating impact of the past decade...but it is rapidly losing this capacity...and there seems little doubt that the quality of our system will probably be gone in the

next 10 to 20 years if the present trends of inadequate state support coupled with tuition constraints continue.

Whether measured in terms of state appropriation per student or fraction of our tax dollars directed toward higher ed, it is clear that in comparison with other states, our present level of public support is simply inadequate to maintain over the long run a system of higher education that is competitive on a national basis.

Despite herculean efforts by the Governor and the State Legislature in recent years to restore adequate support for higher education in Michigan after the devastating cuts of the early 1980s, we continue to fall further behind the national average in state support.

And what will then happen to Michigan. We will become a "have not" state, competing in low wage industries in dying industries. We will have rejected the age of knowledge!

5. Prisons

In fact, the only area where we now lead the nation is in our prison system...

We are now investing more in prisons than in higher ed...that is, we spend more money putting people into jail than we do in keeping them out of jail!

Over the past 5 years, the Corrections budget has increased by 141%, compared to a 25% increase for higher education.

Corrections will be \$633 in FY88-89 (compared to \$1,137 M for higher ed and \$2,144 M for social services), but projected to grow to \$2 B in 1990s.

Each of 25,000 inmates require \$22,000 per year...

Furthermore, we have spent over \$1.3 B to build new prisons...every penny of new construction funds... and now appear prepared to launch a second wave of prison construction, even though demographics suggest that many of these prisons will remain empty.

Further, while state revenues are projected to increase 5% in the year ahead, the exploding corrections budget (\$140 M additional just to operate the new prisons) will eat up this growth, thereby crippling other state priorities such as education and social services.

Other Investment Observations

Importance of Science

US remains leading nation in science. Americans still dominate world scientific literature. Large numbers of foreign students still flock to our universities.

Science pays: it is essential for attacking the major diseases of mankind, to competing for global markets in advanced technologies, to better understanding the ills of our society such as environmental change.

The social rate of return on academic research--how much society receives in benefits from an investment--was recently estimated at 28% (Edwin Mansfield-1988)

Technological innovation accounts for 44% to 77% of increased productivity

But challenges:

assuring an adequate supply in number and quality of NS&E
wise allocation of resources to maximize scientific productivity and fulfill national objectives
adequate level of overall funding for scientific research
availability of state-of-the-art instrumentation and facilities

sensible management and regulation of science
quality of life of scientists
strengthening the symbiotic relationship between government,
academia, and industry

Level of Funding

How much money is enough? Better to point out the loss
to the nation that will occur if we can only support at
a certain level.

In FY89, \$64 B in R&D. But \$37 B of this is DOD.

Only \$10 B into basic science. Should double this!

Annual growth rate of 14% for each of next 5 years

Note that doubling basic science research over 5 years
is a mere drop in the bucket.

(In fact, during Reagan presidency, defense budget
doubled from \$150 B to \$300 B...there would hardly
be a ripple if science budget doubled to \$20 B)

What about federal deficit: "This requires not only spending austerity,
but also a long term strategy to generate new wealth."

What has happened to our priorities?

What is wrong here???

Who is to blame???

Our schools and colleges???

Certainly they must take stronger actions to improve
quality...and strive harder to operate in a more cost-effective
manner...

But their present situation reflects as much as anything
else our own personal priorities...

...as parents

...as volunteers...

...as citizens and voters...

What about our elected public officials???

It is certainly not their fault!!

Listen to their recent messages...

whether it be the Governor's State of the State address...

...or the response from the state Republican leadership...

...or the President's State of the Union address last week...

It is clear that our elected leaders, whether in Washington
or Lansing or our local communities...

Would like nothing better than to make education their
highest priority.

To become

...the Education Governor

...or the Education Party

...or the Education President

They understand clearly the importance of investing in our
human resources, and they are searching valiantly
for creative ways to improve the quality of our schools
and provide adequate and equitable financial support.

But they also face formidable constraints, since in the
end they must be responsive to the wishes of the
electorate...and face it, gang...the electorate today
says:

i) no more taxes...

ii) no more crime...

iii) no more cuts in social services or national defense...

and our public officials have no choice but to respond.

No, the real finger of blame for the crisis we face in education should be pointed,
as Michael Jackson would say, at "The Man in the Mirror"...

...at you and at me...

We are the ones who fail to demand the highest quality
in our educational institutions in Michigan...

We are the ones who steadfastly resist a tax base adequate to support both our needs and desires...and provide an adequate level of support for quality education in this state.

We are the ones who block any effective efforts to achieve equitable financing of education in Michigan.

We are the ones who generally are too busy to help our own children in their studies or participate in their activities.

And we are the ones who insist on building more and more prisons, even when we know that this investment comes out of the hide of education and social services-- which are, of course, the only true long term solutions to crime!

We are the ones who complain about higher tuition costs at our public institutions, even though we know that these fees represent only one-third to one-fourth of the actual costs of an education on our campuses... and that our colleges provide adequate financial aid to offset the burden of even these modest costs to those in need...

Indeed, there is a particularly tragedy in this disturbing recent trend, because when combined with the serious limits on public support which now exist in our state, successful efforts to prevent adequate tuition levels for those who can afford to pay them, will not only undercut our capacity to provide financial aid to those less fortunate, but beyond that, will force our institutions down a path of towards mediocrity.

Let there be no doubt about it...

In higher education, as in every thing else in life, if you want bargain basement prices...you will eventually end up with bargain basement quality...

If there is one common theme to these trends, it can be summarized by that old T-shirt expression:
"Eat dessert first, life is uncertain"

We have become a "live for the moment society"
The "Me Generation" of the 1960s has now up into mature Yuppieshood?

For many years now we simply have not been willing to invest in our future...and the future of our children... We have chosen instead to mortgage this future to pay for mistakes make in our past.

The attitude we have taken toward our most precious resource, our youth, is both callous and alarming.

I simply cannot accept the excuse that "we can no longer afford this investment in the educational opportunities we offer our youth".

To be sure, the immense social needs for welfare assistance, medical care, prisons, and all of the other programs that drain our tax dollars are compelling.

However, by choosing to meet these needs with resources taken away from our system of public education rather than through reforms in our tax structure or political system, we have in reality mortgaged our future by withdrawing the educational opportunities from our youth.

Michigan has had a long tradition of wealth and a caring attitude for its populace. But it seems clear that if priorities are not changed, Michigan will become poorer and poorer and finally it will not be able to meet the "caring needs" of its people. It will then have become a "have not" state.

Yet the writing on the wall could not be clearer:
As we prepare to enter the Age of Knowledge, our ability to sustain the strength of our state and our nation...to achieve the quality of life for

our citizens...will be determined, more than any other factor, by how we develop, nurture, and educate that most precious of resources, our people.

Hence, let me conclude my brief remarks by tossing at you--and at me--several challenges:

Investments

1. **Maintaining America's competitive edge requires attention**
 - 1.1. to our traditional strength -- people and research -- and
 - 1.2. a strong offensive strategy based on these resources.
2. **Taxes, trade, and fiscal policies influence economic**
 - 2.1. competitiveness. But in the long run, a strong base of
 - 2.2. science and engineering research and education is more
 - 2.3. important.
3. **Central theme is that education, broadly defined, will**
 - 3.1. play a pivotal role in the coming economic transition and
 - 3.2. its impact on individuals.
4. **Previous economic transformations were closely associated**
 - 4.1. with major public investment in infrastructure such as
 - 4.2. railroads, canals, electric networks, and highways.
 - 4.3. In the coming economic transition, an equivalent
 - 4.4. infrastructure will be an educated population.
5. **As we enter the Age of Knowledge, our ability to sustain the**
 - 5.1. strength of our nation...to achieve the quality of life for
 - 5.2. our citizens...will be determined by, more than any other
 - 5.3. factor, how we develop, nurture, and educate that most
 - 5.4. precious of resources, our people.
6. **In the long run it will be our investments in the most**
 - 6.1. important resources of all, in people and ideas, that
 - 6.2. will determine the future prosperity and well-being of our
 - 6.3. state.
7. **We have ceased investing in our future!**
 - 7.1. We have chosen instead to mortgage this future to pay for mistakes
 - 7.1.1. made in our past.
 - 7.2. Six-month planning horizon...desire for immediate results...inability
 - 7.2.1. to identify the investments which have to be made today to yield
 - 7.2.2. the objectives for tomorrow.
8. **Education always falls at the bottom of the list of social**
 - 8.1. needs.
 - 8.2. Even though surveys indicate public supports education, our
 - 8.2.1. elected public officials do not seem to listen. They prefer
 - 8.2.2. to fund roads or prisons or football stadiums rather than
 - 8.2.3. the education of our youth!
 - 8.3. Indeed, Michigan, a state with one of the highest per capita
 - 8.3.1. incomes in the nation, continues to slip further and further
 - 8.3.2. behind in its investment in education -- just as our nation
 - 8.3.3. continues to fall further and further behind those very nations
 - 8.3.4. now challenging our economic strength and prosperity.
 - 8.4. The attitude we have taken toward our most precious resource,
 - 8.4.1. our youth, is both callous and alarming.
 - 8.5. I simply cannot accept the excuse that "we can no longer
 - 8.5.1. afford this investment in the educational opportunities
 - 8.5.2. we offer our youth.
 - 8.6. To be sure, the immense social needs for welfare assistance,
 - 8.6.1. medical care, prisons, and all of the other programs that
 - 8.6.2. drain our tax dollars are compelling.
 - 8.7. However, by choosing to meet these needs with resources
 - 8.7.1. taken away from our system of public education rather than
 - 8.7.2. through reforms in our tax structure or political system,
 - 8.7.3. we have in reality mortgaged our future by withdrawing
 - 8.7.4. the educational opportunities from our youth.
 - 8.8. We seem to have forgotten the commitments that past

- 8.8.1. generations of citizens have made to build educational
- 8.8.2. institutions of exceptional quality -- institutions that have
- 8.8.3. provided many of us for years with unsurpassed
- 8.8.4. educational opportunities.
- 8.9. We simply must re-establish the importance of both our
 - 8.9.1. personal and public investments in education, in the
 - 8.9.2. future of our children, in our own future, at the local
 - 8.9.3. level of Michigan -- indeed, if our nation -- is to face
 - 8.9.4. the challenge of the age of knowledge.
- 9. **We see ourselves caring about the future, but we are**
 - 9.1. not preparing for it.
- 10. **Scientific and technological decay, political neglect of**
 - 10.1. education, increasing poverty among young are all
 - 10.2. related...all form a trend in America's political economy
 - 10.3. that could pull our society down.
- 11. **At center of problem is inability to formulate and pursue**
 - 11.1. a strategy of investment.
- 12. **Should examine our patterns of national expenditures**
 - 12.1. more carefully, with an eye to how they treat human
 - 12.2. resources and favor the future.
- 13. **The most highly leveraged expenditures we can make are**
 - 13.1. those on the young.
- 14. **If it is not to be our young people and their work that will gain**
 - 14.1. us a secure place among nations and our better life for
 - 14.2. our citizens, then what will it be instead? And if we fail
 - 14.3. to invest adequately in the successor generation, then
 - 14.4. what kind of caretakers of our heritage and theirs will
 - 14.5. they turn out to be?
- 15. **We are a nation that has always believed deeply in generational**
 - 15.1. improvement--in the prospect that things will be better for
 - 15.2. our children.
- 16. **We must join with others to insist that opportunity be renewed,**
 - 16.1. and that the present pattern of generational neglect be
 - 16.2. reversed.
- 17. **Americans must put aside their suspicions and answer that**
 - 17.1. call, because the result of failure will be that 40 years from
 - 17.2. now a generation will stand where we are today and know
 - 17.3. that things are, for the very first time in history, worse than
 - 17.4. they were for their fathers and mothers.
- 18. **"Eat dessert first, life is uncertain" expresses the present US**
 - 18.1. fiscal policy. It is a prescription that can make the system fat,
 - 18.2. happy, but dangerously clogged with cholesterol.

A Whack at the Professions

Reich classifies 21st Century activities as:

“symbolic analyst”

“service”

But another classification would be in terms of “value-added”

Creating, value-adding activities

Engineering

Art

Rearranging, value-adding activities

Medicine

Rearranging or thwarting, value-detracting activities

Law

Political