Rene Rosenbaum

RENE:

Thank you Rex for inviting me to be a part of this important and very interesting set of discussions we are going to be having regarding the issue of diminishing population density and the downsizing of municipalities. I will be speaking on some data on population density, in addition to that some theory that I have looked at or developed in context to explain the decrease in population density in the state and then we will look at how this theory has really has been used not so much to explain population density but it is part of a larger set of economic theories and policies that help explain why population density has diminished in Michigan in particular. We'll look at some of the implications of this theory and then some conclusions regarding how we can protect ourselves by minimizing the danger of this occurring in the future.

Some data on population density change in Michigan. We see here that in 2000 we had close to 10 million people in the state of Michigan. We lost some people between 2000 and 2010 but because of the small decline we have pretty much the same population per square mile between 2000 and 2010. If you take the 275 cities in the state, 23 of these cities have 50,000 or more people. The population loss for cities with 50,000 or more people over the ten year period was 292,587. So that is the loss in residents that we are going to be looking at as part of trying to understand population density here in Michigan.

So we have grouped the municipalities in the state. These first seven municipalities are the municipalities that have 100,000, above 100,000 residents in 2010. Detroit has nearly three quarters of a million residents and you see that in 2010 the population per square mile was 5,144 people per square mile. This compares to 6,855 people per square mile in 2000, so there's a change in population per square mile of 1,711 people, and that's pretty significant. In Grand Rapids where you have a population of 188,000 residents, in 2010 the population density was 4,236; that compares with 4,431 which reflects a decline of 195 people per square mile. And you see that Warren, with 134,000 residents, also experienced a population decrease of 133 people per square mile. Sterling Heights, 156 people; Lansing experienced 228 people per square mile loss over the ten year period. Flint has 100—102,000 residents and had a decrease in population density of 650 residents per square mile.

And if you look at those municipalities that had between 100 and 70 thousand residents you see that for the most part there was also a decrease in residents per square mile, or population density decline for each and every municipality. There is a range of variation in the change and that reflects less so the size of the municipality and more so the nature of the industry in those particular communities.

If you look at the remaining six or seven municipalities that have the population of between 50 and 63 thousand residents you find that similar pattern of diminishing residents per square mile. Pontiac was pretty significantly hit and Saginaw was pretty significantly hit. So you see the impact of the recession, the big recession, has been pretty significant in particular communities. And the size has been an important factor and it seems to be driven by manufacturing, in particular the automotive industry.

If we aggregate some of the municipalities by, into counties, we see that Genesee County lost 650 people per square mile. Oakland lost 496 people per square mile, Macomb gained 23 people per square mile, Wayne lost 2,057 residents per square mile, Washtenaw 127 residents per square mile, Calhoun lost 17, Kalamazoo lost 117 residents per square mile. Ingham County, particularly Lansing, lost 228 residents per square mile. And then you have Kent with 108 lost and Saginaw with a loss of 572 residents per square mile. So we see that the bulk of the impact in terms of population density decline is reflected in the southeastern part of the state but also where there's significant manufacturing activity.

So what explains this density decline, population density decline? In trying to get a handle on that I came up with an economic theory of population density change and I used three basic variables: capital investment, jobs and population. And basically I stipulate that if you have in increase in capital investment, you have an increase in jobs and that increase in jobs leads to an increase in population. Conversely if you have a decrease in capital investment, that leads to a decrease in job slots, and that leads to a decrease in population. With that theory we recognized that capital investment becomes a significant variable to impact, okay? And there have been economic theories that have tried to impact that variable, so there's some pervading economic and political theories out there and that's the prevailing concept that we want to understand because part of that understanding helps us understand why we have the diminishing population decline.

We say this is the prevailing theory because it is considered to allocate resources most efficiently. And this perspective has a theoretical component as well as a policy component. And theoretically this increased capital investment calls for limited government, private sector competition and markets, private capital and other resources, capital and labor mobility, and selfinterest and responsibility. This theoretical construct is supported by policy like free trade, incentives to business to attract them to the municipalities, and more generally creating a good business climate that supports business development.

This theory is prevailing because we value efficiency. However there are different views on efficiency and how we allocate our resources efficiently. I want to speak to the prevailing approach which is what I call the firm efficiency standard. And here you have firms seeking to equate marginal costs to marginal revenue. These firms basically are addressing their private costs for the most part with a private balance sheet.

We can contrast this firm efficiency standard—which is the prevailing standard—with a more comprehensive holistic approach to efficiency, or what I call the social efficiency standard. And here we're looking at total costs comprising both public and private costs. So we're considering a public balance sheet that takes into consideration both private and public costs. So this social efficiency standard of efficiency says that firms' allocation costs must be—when they move around—that cost must be weighed against the cost to the public of laying off workers; we call those social costs. And disregarding unusable facilities and infrastructure we call that sunken

costs. All the highways for example that are no longer being utilized or up kept, tax losses, and those considerations that the community tends to go after the appropriations league.

So the capital mobility strategy to increase capital investment has basically been considered as creative destruction, as a necessary evil, okay? But I tend to think in terms of it being more akin in characteristics to economic instability. So we're going to look at how we can recognize that municipalities are operating in a context of economic instability by pointing to some characteristics of that instability. For example there's economic instability in terms of recessions in the United States. There's been 47 recessions in the United States since 1790. The average duration of the eleven recessions between 1945 and 2010 is 10 months, compared to 18 months for recessions between 1919 and 1945, and 22 months for recessions from the period of 1945 and 1790, okay, or 1919 and 1790. So the recession periods have gotten shorter but the instability is still there in terms of the frequency of the recessions and the duration of these recessions.

If we look at the more current period, the period since The Great Depression, we have experienced [counts] 1,2,3,4,5,6,7,8,9,10,11,12,13,14, 14 recessions of significant duration; the shortest one was 6 months long. So for the most part we've averaged close to a year in duration. And these recessions have occurred pretty frequently so that the time between recessions is from 1 year; from 6 years to just 1 year and you see the frequency of these interruptions. And that's the point that we want to make here, that there is significant economic instability in our economy and how do we deal with that? And part of the economic instability in the form of recessions I think has to be explained by the nature of capital mobility, okay?

Job displacement due to trade deficits with Mexico, by selected states. Another element of this instability is job displacement. And here we look at job displacement due to trade deficits with Mexico for 2010. California lost 86,500 jobs, okay, in 2010, that's .5 percent of the total employment. Texas lost 55,000 jobs; Michigan 43,000; Ohio, 34.9; Illinois, 34.7; and the whole United States 682,900 jobs lost, okay? So U.S. trade deficits with Mexico in 2010 has led to job displacement in all the 50 states and the District of Colombia, however job displacement has been particularly concentrated in the mid-west, okay? So we have here another example of how policy, in the form of free trade, has created and contributed to economic instability. And Michigan by far the most impacted in terms of the share of jobs lost as proportion of the total employment base.

If we look at foreign direct investment by the U.S. or multinational corporations abroad investing their capital, that has increased 94 times since 1960 levels. In 1960 the U.S. foreign direct investment was 33.7 billion dollars. In 2008 it was 3 trillion, 162 billion dollars. So we have seen in the last 50 years significant increase in foreign direct investment by U.S. multinational corporations. And the other point to make on this slide is that the bulk of that increase has been in wealthier nations, not in developed nations necessarily.

Foreign business investment in the United States. So we previously showed you a slide we were talking about corporations investing abroad, this is the other side of the story of how other corporations from other nations are investing in the U.S. And you see that the total investment was 2.3 billion. So bar far the amount of dollars the U.S. invests abroad exceeds the amount of dollars that foreign corporations are investing in the United States. The leaders of those nations that are investing in the United States are Britain with 454 billion dollars, followed by Japan and the Netherlands with \$259 billion apiece. So this is basically how much is coming in, okay, and the previous slide was how much is going out. And you see that much more is going out than is coming in. In the real context we look at the total world foreign direct investment stock and that amounts to \$14.9 trillion and the share for the U.S. is \$2.3 trillion. Now there's also federal direct investment flows, in 2008 that was \$1.7 trillion and the share of that for the U.S. was \$3.16 billion and that happens to be the world's largest.

And the point of this is that these are examples of capital mobility. Federal direct investment in Mexico before and after NAFTA, okay? You see here that between 1980 and 1993 before NAFTA, this was the foreign direct investment by U.S. corporations in Mexico as a percent of Mexican GDP. Compare that to the 1994-2007 period when you have NAFTA and you have over a 2.5, 2.7, 8 percent increase; nearly a triple size increase in foreign direct investment as a result of NAFTA, or during the period that NAFTA was implemented.

So what is U.S. policy toward outward foreign direct investment? U.S. tax policy; basically extremely supportive of outward foreign direct investment and U.S. based multinational corporations except when national security is at stake, okay? But for the most part very supportive of foreign outward direct investment. And policies have been in a great place to demonstrate that support with that foreign tax credit that allows foreign tax credits to be paid through foreign governments. U.S. tax liabilities, okay, and for foreign tax referrals basically this allows remaining liability to be postponed until the foreign subsidy remits back to the U.S. parent, or right back to the U.S., if ever. And then there's foreign investment insurance to protect corporations that come under hostile regimes or anti-appropriation activity, foreign governments that may threaten U.S. investments abroad, okay? Those are policies that are in place to protect U.S. multinational corporation foreign direct investment abroad.

So in conclusion the diminishing population density was particularly acute in certain cities and countries. Community economic stability is not going away. So how can we move away from community economic instability and population change and decline? An alternative to mobile capital is rooted or anchored capital. Rooted capital comes in the form of small business, cooperatives, ESOPs, nonprofits, community development corporations, community develop financial intermediaries, credit unions, etc. So there's ways of targeting centers of locally owned business, these tend to be more stable in the community.

There's a whole set of import substitution policies, okay? The adoption of processes of import substitution are important to diversify the economy, to keep money circulating locally and to use and develop local resources. So in terms of import substitution policies, we can think in terms of buy-local import substitution policies. These are policies that basically seek to encourage purchase of local goods and services by local farms, local consumers, local governmental entities. Like local buyer networks, household consumers, public sector

procurement preferences, these are examples of efforts to try to get local buyers, households, governments and private sector enterprise to tap into purchasing locally.

Alternatively you can think in terms of incentives to encourage local production by local firms, and so we call those produce local import substitution policies. And we can, for example, identify imported inputs from local firms and link them to local producers of the imported input. We can stimulate the local production of goods that are currently imported into the local economy for want of a local supplier. We can develop more general place based business districts and networks. We can use previously used raw materials to produce previously imported goods locally. Local food production is another way to expand local production. So once we recognize that it is important to establish firms that have a characteristic about them that reduces the risk of their leaving the community we can be creative in the types of enterprises that can be nurtured through our local communities and more generally polices that support that type of enterprise.

So thank you very much, I hope that this was a wonderful presentation.