

## \$ P N N F O U E

Title:

"Inequality of Incomes and of Alcohol Consumption in the U.S.

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Timothy Mathews, Professor of Economics at Kennesaw State University & Director of the Bagwell Center for the Study of Markets and Economic Opportun In recent years manpoliticians academics, and policy analysts have paid increasing attention to income and wealth inequality. The most common way that economists measure such differences is by first constructing a Lorenz Curve and the putting the value of a Gini Coefficient. For example, thinking about the distribution of incomes, we could conceptually order everyone in society from lowest income to highest income. The percentage of total societal income earned by these people. Acording to U.S. Census Bureau data, in 2015 the 20% of households with lowest incomes in the U.S. collectively earned 3.1% of all income earned by all U.S. households. This observation gives us one point on the bl. Science Lorenz Curve. Repeating this exercise for all segments of the population (from the 1% of households with lowest incomes to the 99% of households with lowest incomes) heleetout the etire Lorenz Curve, as illustrated in the accompanying figure which was constructed based upon U.S. Census Bureau data.

With fraction of totalpopulation on the horizontal axis and fraction of totatedome on the vertical axis, the Lorenz Curve must stratiseveral mathematical properties. It must pass through the points (0,0) and (1,1); it must be upward sloping; it must get steeper as we move up the curve; and (so long as there are any differences in incomes) it must lie below the "45 degree line." Thi final observation can be understood by recognizing that the Lorenz Curve would exactly coincide with the "45 degree line" or "Line of Perfect Equalityonly everyone had the same exact income. At the other extreme, if only one person had any income faredyone else in society had zero income), then the Lorenz Curve would be a "reversepassing through the points (0,0), (1,0), and (1,1).

This visual summary of the distribution of income can be reduced singlesummary measure called the Gini Cotefent. As can be seen from the figure, there is a less haped area between the Lorenz Curve and "Line of Perfect Equality de Gini Cotefficient is defined as twice the value of this enschaped area. Numericatly e Gini Coefficient can range from a low of zero (if there are no differences inciomes, so that he Lorenz Curve coincides with the "Line of Perfect Equality" and the lenschaped area vanishes a high of one (if one person estall the income, so that he Lorenz Curve is a "reverse and the lenschaped area encompasses the entire triangle below the "Line of Perfect Equality"). A high valued Gini Coefficient reveats greater inequality.

The World Bank estimated value of the Gini Coefficient for incomes in the U.S. to be .42 in 2016. This isigher than the values of .41 realized in 2004, .38 realized in 1991, and .35 realized in 197,9consistent with a narrative of increasing inequality either decades.he U.S.'s value is higher than most her OECD countries recent year, ssuch a Canada (.34 in 2013), France (.33 in 2015), United Kingdom (.33 in 201,5) apan (.32 h 2008) Germany (.32 in 2015) Sweden (.29 in 20), 5and L90>2p()]TJ.34, 6.1 (eW)-3 (()-4 (.8-2 (32 i)8 (n)-3 (2015)]TJ88 Tw 0.3 value of the Gini Coefficient in the U.S. has increased in recent decades and (ii) that the value of the Gini Coefficient in the U.S. is

incorrectly perceiving inequality of a magnitude that is not at **dihe** with what we should truly aim to gauge. This is not to say that observations on income inequality are never useful or