Let $B$ be the size of a basic income paid to every citizen. Suppose this is financed by a progressive non-negative marginal tax rate function $f(x)$, which describes the tax rate on an additional dollar $x$ of pre-UBI, pre-tax income. Let the pre-UBI, pre-tax income of the $i^{th}$ person in the population be $r_i$. The post-UBI post-tax income $\hat{r}_i$ for individual $i$ is then

$$\hat{r}_i = r_i + B - \int_0^{r_i} f(x)dx$$

(1)

Alternatively, we could implement a negative income tax which implements the same set of transfers. This tax would have marginal tax rate $g(x)$. The resulting post tax income $\tilde{r}_i$ is thus

$$\tilde{r}_i = r_i - \int_0^{r_i} g(x)dx.$$  

(2)

For this to implement the same transfer as the basic income, we require $\hat{r}_i = \tilde{r}_i$ for all $r_i \geq 0$, and therefore have

$$B - \int_0^{r_i} f(x)dx = - \int_0^{r_i} g(x)dx.$$  

(3)

Now we decompose $g(x)$ as $g(x) = \tilde{g}(x) + f(x)$, separating out the component that is identical to the UBI marginal tax rate and the component that might differ. With this decomposition and from linearity of integration we have

$$B - \int_0^{r_i} f(x)dx = - \int_0^{r_i} \tilde{g}(x)dx - \int_0^{r_i} f(x)dx$$

(4)

$$B = - \int_0^{r_i} \tilde{g}(x)dx.$$  

(5)

which can only be true for all $r_i$ when $\tilde{g}(x) = -B\delta(x)$, where $\delta(x)$ is the Dirac delta function. The marginal tax rate for the NIT is therefore

$$g(x) = -B\delta(x) + f(x)$$

(6)

and is identical to the UBI marginal tax rate everywhere except for infinitesimal amounts earned.
In short, the overall transfers from $r_i$ to $\hat{r}_i$ or $\tilde{r}_i$ are identical, and so the implied marginal tax rates are at some level irrelevant.

It is also worth mentioning that part of the answer rests on definitions about what money is taxed. Here we have considered the case where the UBI itself is not taxed. If it is taxed, then the marginal tax rates will look slightly different (but implement identical overall transfers).